# MISSISSIPPI RIVER AND TRIBUTARIES

APPROPRIATION TITLE: Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN - Investigations, Fiscal Year 2018

| Study | Total Estimated Federal Cost | Allocations Prior To FY 2015 | Allocation in FY 2015 | Allocation in FY 2016 | Allocation in FY 2017 | Budgeted Amount in FY 2018 | Additional to Complete After FY 2018 |
|---|---|---|---|---|---|---|---|
| Collection and Study of Basic Data – Surveys, Gages, and Observation – Flood Risk Management (Continuing) | N/A | $10,199,000 | $9,646,000 | $10,029,000 | $7,000,000 | $2,700,000 1/ | N/A |

These studies and data gathering activities encompass all of the Lower Mississippi River Basin. Major flood events provide invaluable insight into the dynamics and management of large river systems. The flood of 2011 on the Mississippi River provided an exorbitant amount of data into how the Lower Mississippi River Main Stem (LMRMS) project and the projects in the tributaries of the Lower Mississippi River performed when compared to the objectives first outlined over 85 years ago in the Flood Control Act of 1928 and later revised in subsequent Acts. Numerous features have been constructed since the original levees failed in 1927 causing over 500 deaths, flooding over 26,000 square miles, and leaving over 600,000 people homeless. While the features of the LMRMS project performed adequately during the 2011 flood, the 2011 flood raised concerns as to whether the current project design, or its operating regime, needs to be revised to address the Project Design Flood (PDF) as authorized in the 1928 Flood Control Act and subsequent acts. Scientists and engineers need to evaluate the 2011 flood data to see how well the project, as currently designed, would perform in a larger flood event. The U.S. Army Corps of Engineers (Corps) conducted a reevaluation of the LMRMS project after the 1973 flood event, which resulted in a revised design flowline to provide the PDF level of protection. That reevaluation resulted in some adjustments to design, construction and operation of the project. Now, 40 years later, factors such as the flood of 2011 (which was approximately 20 percent larger than the 1973 flood) and other changes in the basin require a new reevaluation to reconfirm or revise the design flowline. Since the 1973 flood event, state of the art computer models have replaced previously used physical models with more advanced numerical and sophisticated data gathering models along with Light Detection and Ranging (LIDAR) data that provides enhanced terrain data. These new methods will allow for better predictions of the performance of the system during future events up to, and including, the PDF. Also as a result of the 2011 Flood, engineers and scientists discovered that data was not available to predict the long term changes on channels and sediment transport. Therefore, the Corps has reinstated a Geomorphology and Potamology program for the Basin, which had been ongoing up to the 1980's, but discontinued by the early 1990's. The entire operation of the project during larger flood events hinges on whether the design/construction/operation is synchronized to work as a system. The flowline effort is necessary to ensure the proper performance of the system for floods up to, and including, the PDF. The geomorphology and potamology program will focus on system-wide efforts, specific gage analysis and geometric assessment for the middle and lower Mississippi River, and a refined one-dimensional sediment transport model. Without this reevaluation and new data to know how the system would respond under today's and projected future conditions, the water management and design of the project, as currently designed, may be based on data/assumptions no longer valid which could compromise its successful operation as a system and potentially lead to catastrophic consequences. Without a sound understanding of the geomorphology of the river, prediction of system response to these various actions, or lack thereof, can also potentially lead to undesired consequences such as increased maintenance requirements, adverse impacts to navigation and flood control, and ecosystem degradation. In addition, the need to manage river sediment as a resource for coastal restoration purposes has recently expanded the scope of sediment management. A thorough understanding of sediment trends will be essential in the development of a comprehensive and sustainable sediment management plan. Failure of levees or structures or the inability of the project to perform as designed could result in significant loss of life and property since over 4,000,000 people now live within the Lower Mississippi River Basin.

Fiscal Year 2017 funds are being used to complete the Flowline Assessment necessary to ensure the proper performance of the project as a system for floods up to, and including the PDF, including report preparation, Agency Technical Review, Independent External Peer Review, and the coordination of findings with the Mississippi River Commission and the public; continue the collection of essential basic data used in the planning, design, and operation of the flood risk management projects of the Basin, including information on streamflow, gages, rainfall, floods, mapping, and other items of related hydrologic nature including aquatic and water quality and quantity monitoring; preserve historical data files, reports, and maps and to digitize the information for future reference; and continue conducting geomorphic and potamology assessments.

Fiscal Year 2018 funds will be used as follows: Data collection at stream/tributary river gages ($401,000); Replacement and repair of stage gages ($299,000); Initiate Economic Development Report stemming from Flowline Assessment ($2 million).

This activity was authorized by the Flood Control Act of 1928.

1/ Estimated Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2016 to FY 2017 was $5,010,000, including $5,007,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2018 from prior appropriations for use on this effort is $3,000. This amount will be used to perform work on the study as follows: Funds will be utilized to continue geomorphic and potamology data gathering and studies.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction (Commercial Navigation)

PROJECT: Lower Mississippi River Main Stem (Commercial Navigation) (Continuing)

LOCATION: The Lower Mississippi River Main Stem (LMRMS) Project is located in the Lower Mississippi River and along its banks, from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, which is a distance of approximately 966 miles; and in an area of approximately 595,000 acres in the Atchafalaya River basin, bounded on the east and west by the East and West Atchafalaya Basin Levees, in southeast Louisiana.

Construction of one commercial navigation feature of the LMRMS project is ongoing:

(1) The Channel Improvement feature of the project is located in the Mississippi River and along its banks from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, which is a distance of approximately 966 miles.

DESCRIPTION: The Channel Improvement feature consists of stabilizing the banks of the river in a desirable alignment and obtaining the most efficient flow characteristics for commercial navigation by means of dikes and improvement dredging in Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1962, 1965, 1966, and 1970.

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.18 to 1 at 7 percent. The benefit-cost ratio is based on all features which comprise the LMRMS project, including features that have completed construction.

INITIAL BENEFIT-COST RATIO: This feature was authorized in Fiscal Year 1928 and initial construction funds were provided in FY 1928. The authorized comprehensive review of the project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, provides a base estimate of the benefit-cost ratio for the LMRMS project. On that basis, the benefit-cost ratio for these features computed for the base estimate would be around 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

CHANNEL IMPROVEMENT (NAVIGATION) 1/
SUMMARIZED FINANCIAL DATA

| | | | | ACCUM PCT OF EST FED COST | STATUS (1 January 2016) | PCT CMPL | PHYSICAL COMPLETION SCHEDULE |
|---|---|---|---|---|---|---|---|
| Estimated Federal Cost | | $ 4,161,158,000 | | | Entire Project | 93 | TBD |
| Estimated Non-Federal Cost | | 1,870,000 | | | | | |
| Cash Contributions | 1,770,000 | | | | | | |
| Other Costs | 100,000 | | | | | | |
| Total Estimated Project Cost | | $4,163,028,000 | | | | | |
| Allocations to 30 September 2014 | | 3,214,240,000 | | | | | |
| Allocation for FY 2015 | | 40,861,000 | | | | | |
| Allocation for FY 2016 | | 7,866,000 | | | | | |
| Allocations for FY 2017 | | 16,127,000 | 1/ | | | | |
| Allocations through FY 2017 | | 3,279,094,000 | 2/ 3/ 4/ 5/ | 79 | | | |
| Estimated Unobligated Carry-in Funds | | 11,000 | 6/ | | | | |
| President's Budget for FY 2018 | | 14,610,000 | | 79 | | | |
| Programmed Balance to Complete after FY 2018 | | TBD | | | | | |
| Un-programmed Balance to Complete after FY 2018 | | 0 | | | | | |

1/ Includes $5,346,000 of Public Law 114-254 Supplemental funds.
2/ Total costs and allocation through FY 2016 include flood damage reduction funding of the channel improvement feature.
3/ $0 reprogrammed to (from) the project.
4/ $0 rescinded from the project.
5/ $0 transferred to the Flood Control and Coastal Emergencies account.
6/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 was $11,000 for Navigation. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.

PHYSICAL DATA: The physical data for the Channel Improvement feature consists of 19,135 acres of land and damages; 1,097 miles of revetments; 362 miles of dikes; and 1 pumping station.

JUSTIFICATION: The major commodities shipped on the Lower Mississippi River are agricultural goods and bulk industrial materials. The five-year average commercial tonnage is 178,000,000 tons.

The benefit-cost ratio was derived by measuring the total benefits credited to the LMRMS components against their total cost. Average annual remaining benefits for the composite of LMRMS features are as follows:

| Annual Remaining Benefits | Amount |
|---|---|
| Navigation | $109,522,000 |
| Total | $109,522,000 |

FISCAL YEAR 2017: The appropriated amount, plus carry-in funds, is being applied as follows:

Dikes: The planned dike work consists of the following items:

| | |
|---|---|
| Kentucky Point, KY | $2,800,000 |
| Lands and Damages | 30,000 |
| Cultural Resources | 60,000 |
| Planning, Engineering, and Design | 2,360,000 |
| Construction Management | 5,542,000 |
| Supplemental P.L. 114-254 (Repair Cost) | 5,346,000 |
| Total | $16,138,000 |

FISCAL YEAR 2018: The budgeted amount will be applied as follows:

Dikes: The planned dike work consists of the following items:

| | |
|---|---|
| Keys Point, TN | $3,800,000 |
| Randolph, TN/Hatchie Towhead, TN | 2,600,000 |
| Ajax Bar, MS | 5,110,000 |
| Lands and Damages | 80,000 |
| Cultural Resources | 80,000 |
| Planning, Engineering, and Design | 2,290,000 |
| Construction Management | 650,000 |
| Total | 14,610,000 |

NON-FEDERAL COST: In accordance with Section 4 of the Flood Control Act of 1944, as amended by Section 207 of the Flood Control Act of 1962, the Non-Federal sponsor must comply with the requirements listed below:

| Requirements of Local Cooperation | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs |
|---|---|---|
| Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal area. | $ 100,000 | |
| Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, and replacement of recreation facilities. | 1,770,000 | $251,000 |
| Total Non-Federal Costs | $1,870,000 | $251,000 |

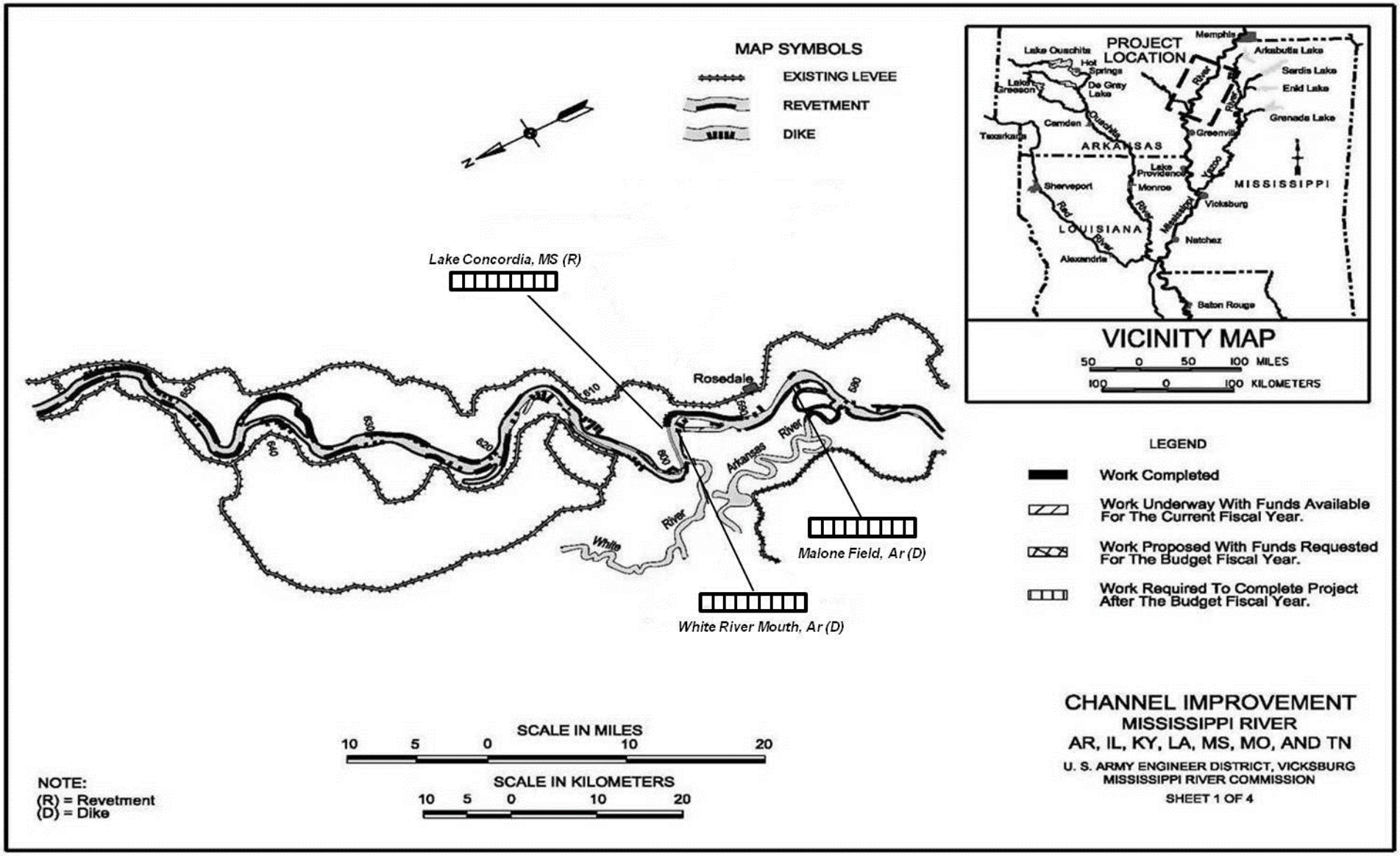
STATUS OF LOCAL COOPERATION: Assurances furnished by the Missouri Department of Conservation for the Dorena Recreation Facility were accepted 27 August 1971; assurances furnished by the Tennessee Department of Conservation for the Richardson Landing Recreation Facility were accepted 3 September 1976; and assurances furnished by the City of Memphis, Tennessee, for Volunteer Bicentennial Park were accepted 11 September 1975. Assurances furnished by the City of Osceola, Arkansas, for Lake Neark, Arkansas, are embodied in the contract for cost sharing approved on 19 September 1982. A Local Cooperation Agreement for the Ed Jones Boat Ramp with the State of Tennessee was signed 27 October 1988. A Local Cooperation Agreement for the Shelby Forest Boat Ramp with the State of Tennessee was signed 11 October 1990. A Local Cooperation Agreement for the Dyersburg, Tennessee, Boat Ramp with the State of Tennessee was signed 11 July 1994.

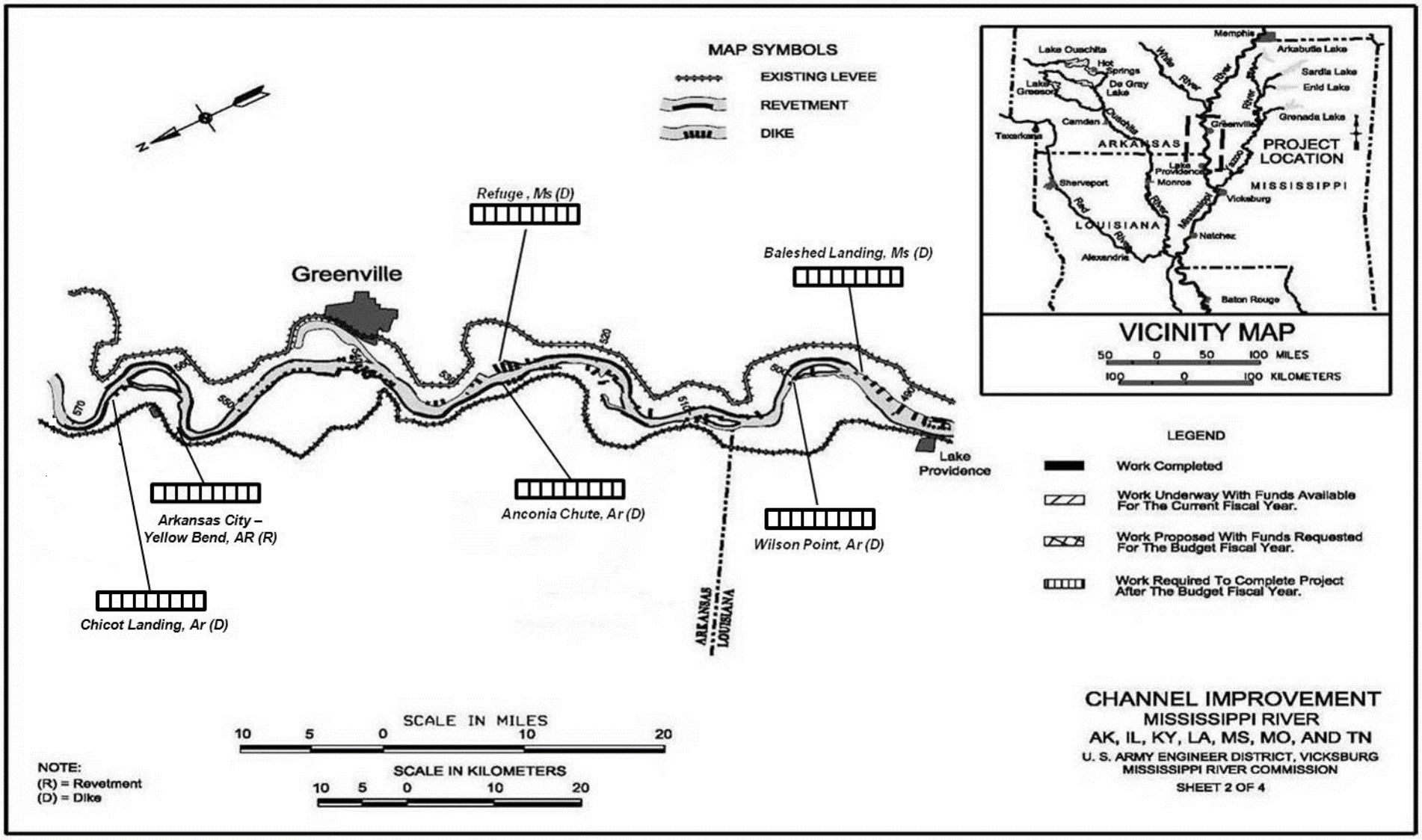
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $4,161,158,000 is an increase of $150,158,000 from the latest estimate ($ 4,011,000,000) presented to Congress (FY 2017). This change includes the following items:

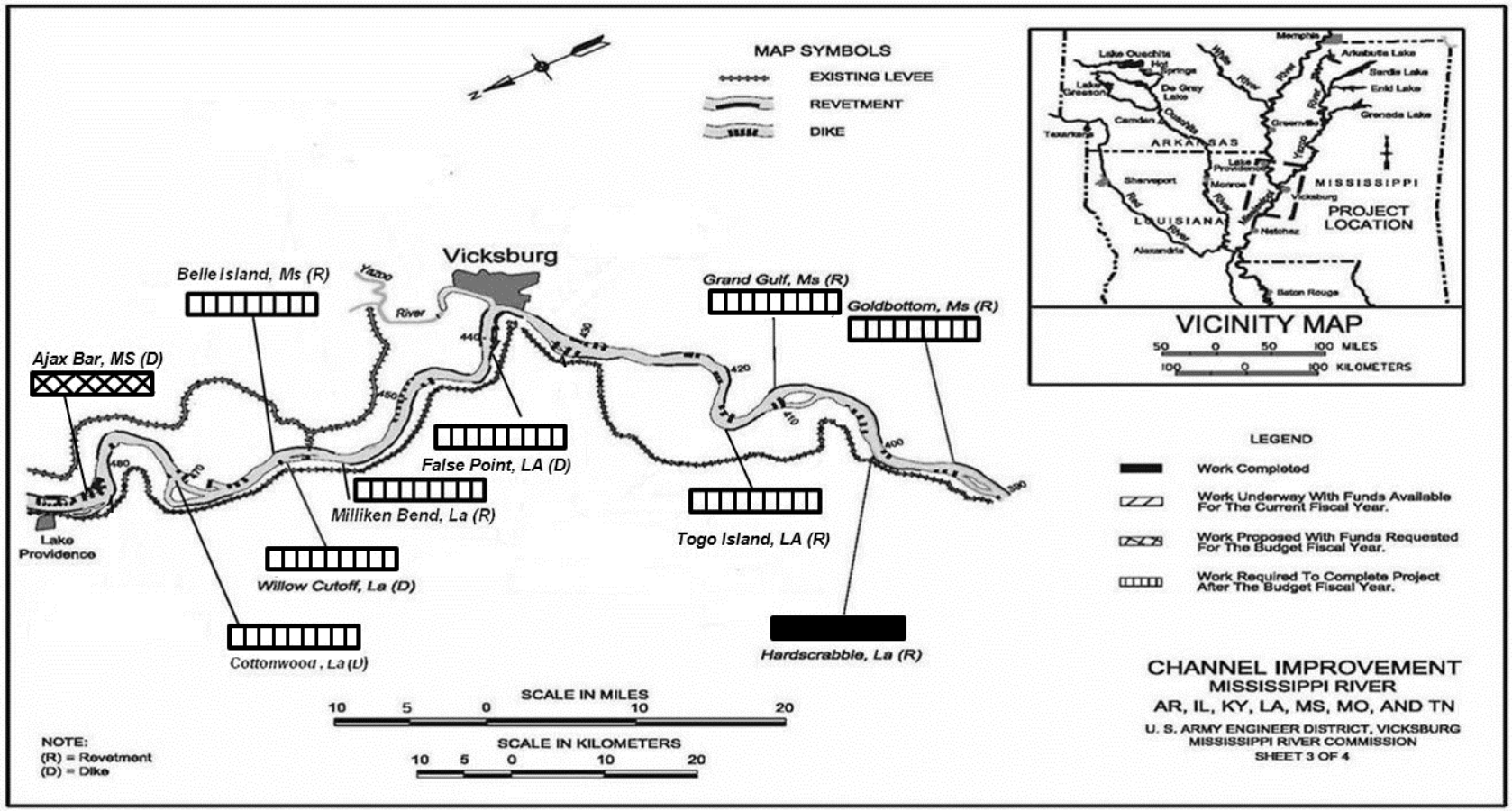
| | |
|---|---|
| Price Escalation on Construction Features | $150,050,000 |
| Price Escalation on Real Estate | 108,000 |
| Total | $150,158,000 |

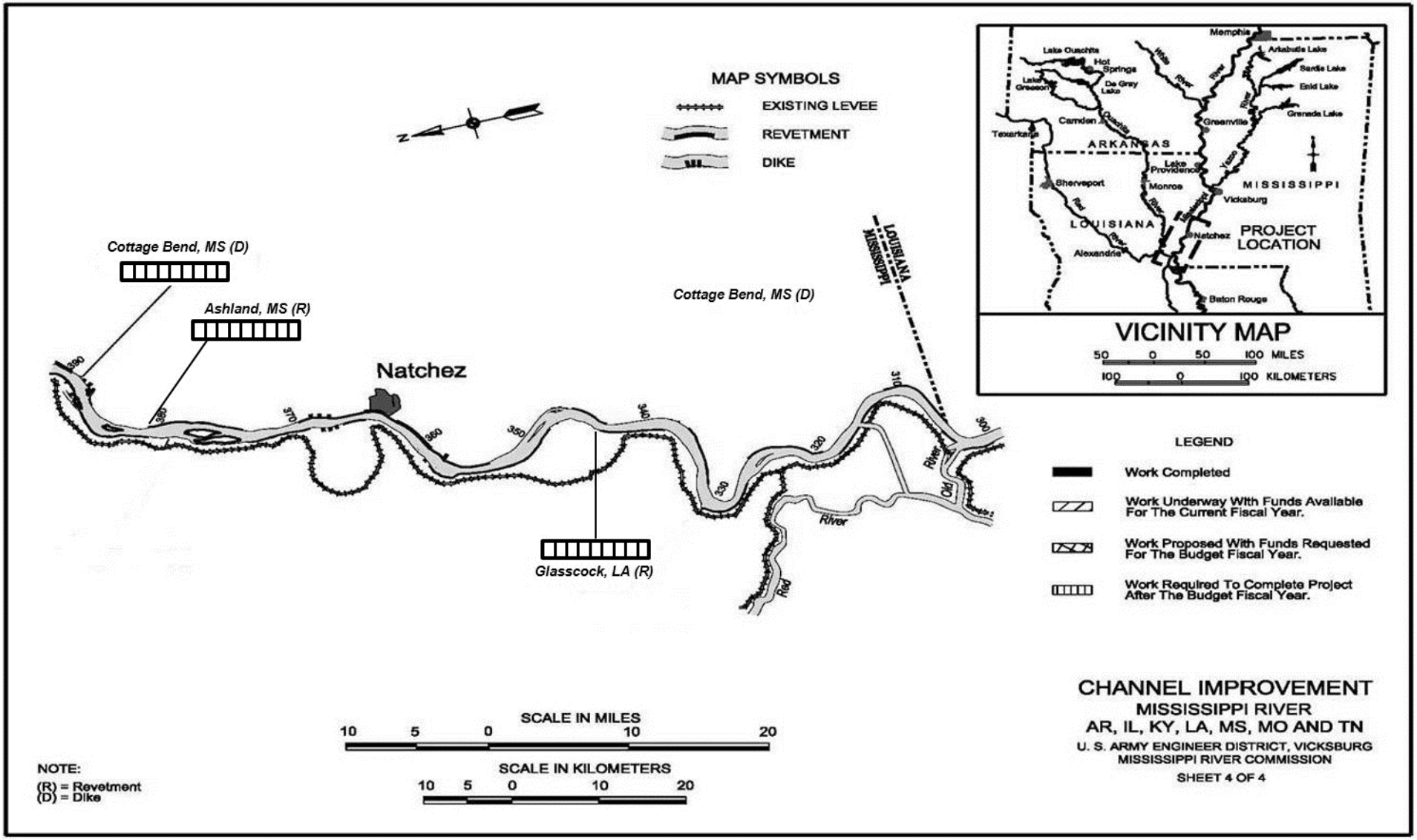
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976.

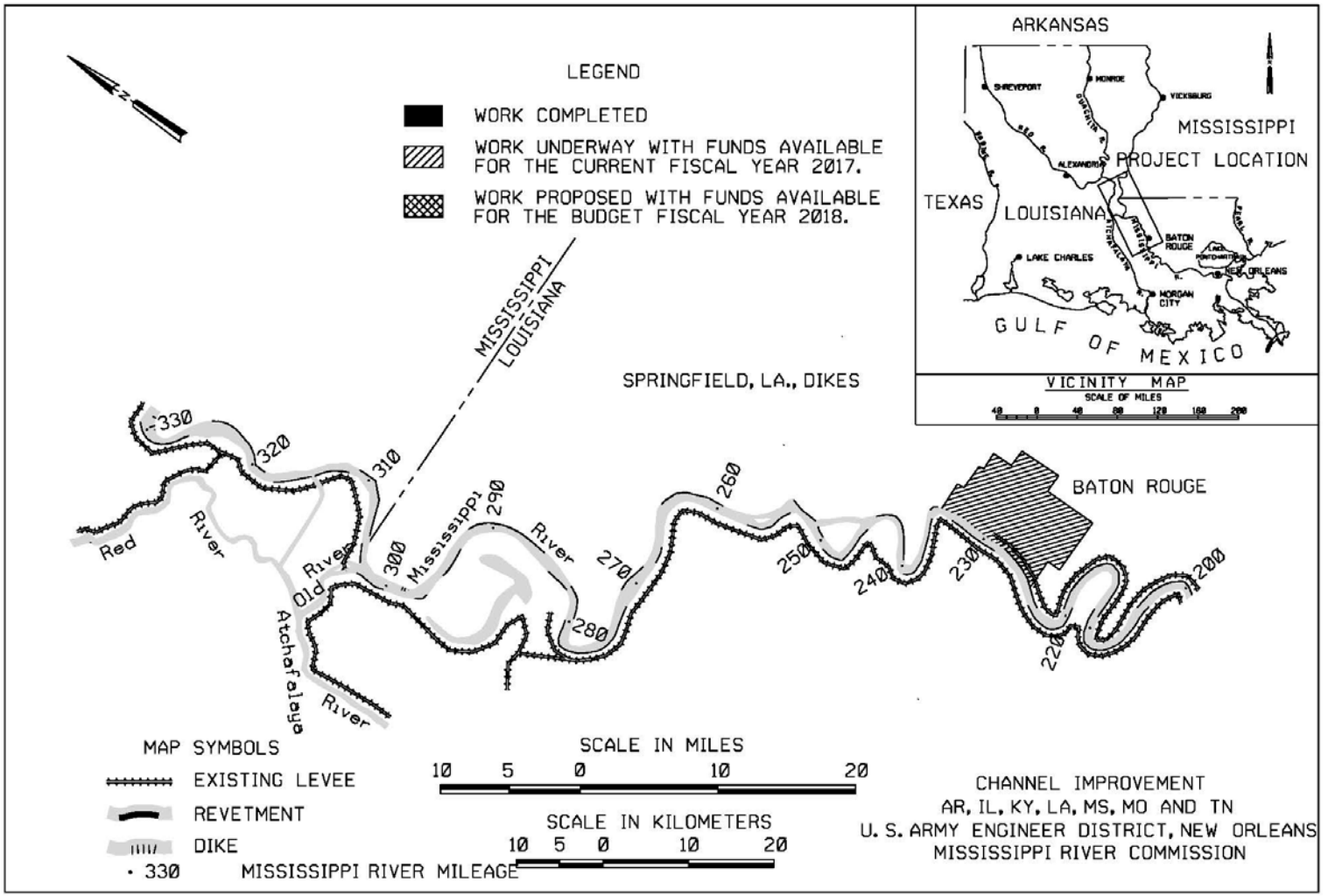
OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.


MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
Lake Concordia, MS (R)
Rosedale
Malone Field, Ar (D)
White River Mouth, Ar (D)
Arkansas River
White River
PROJECT LOCATION
Memphis
Lake Ouachita
Hot Springs
De Gray Lake
Camden
Texarkana
Greenville
Arkabutla Lake
Sardis Lake
Enid Lake
Grenada Lake
ARKANSAS
MISSISSIPPI
LOUISIANA
Shreveport
Monroe
Lake Providence
Vicksburg
Natchez
Alexandria
Baton Rouge
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
NOTE:
(R) = Revetment
(D) = Dike
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AR, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 1 OF 4

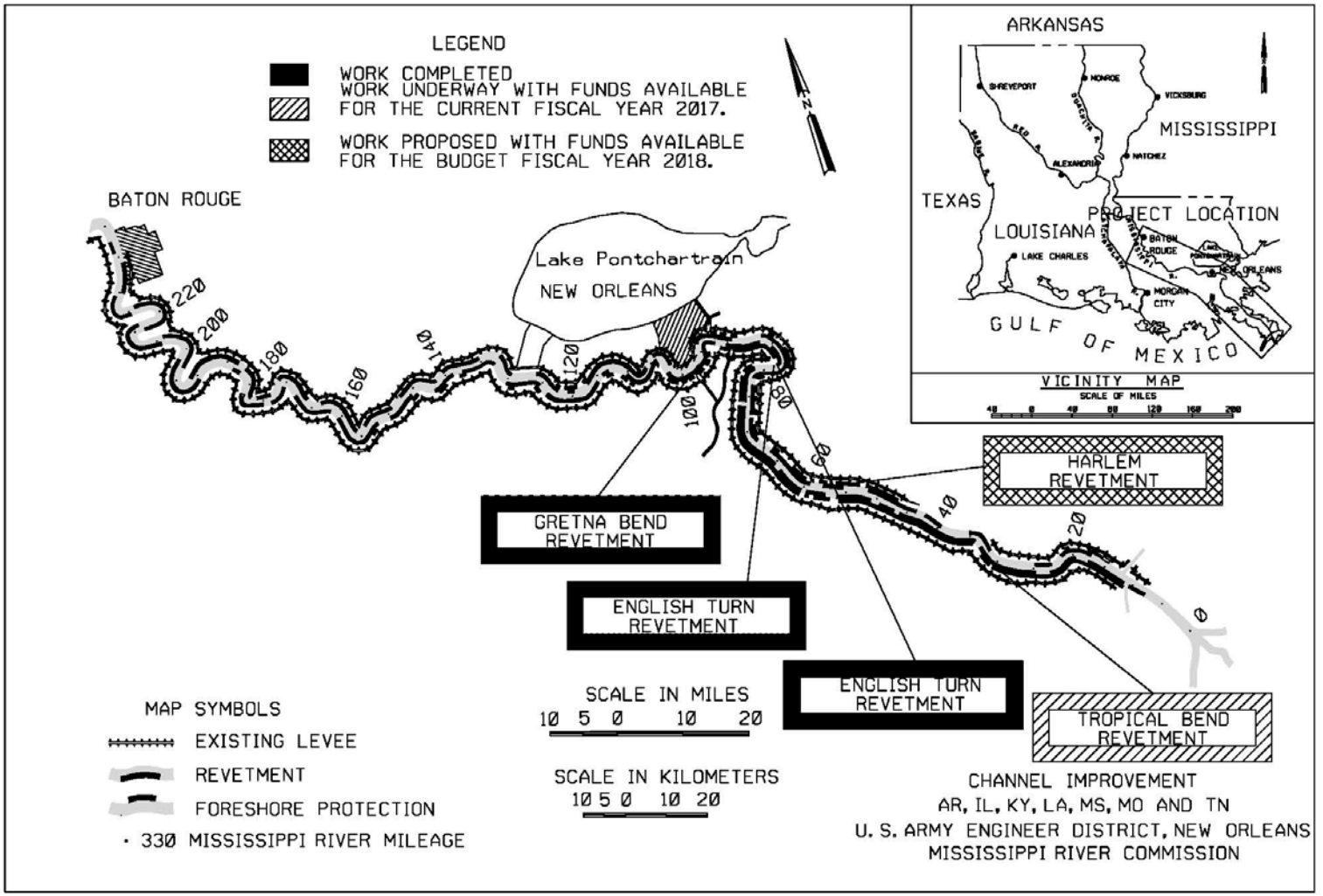

MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
Greenville
Refuge , Ms (D)
Baleshed Landing, Ms (D)
Arkansas City –
Yellow Bend, AR (R)
Anconia Chute, Ar (D)
Wilson Point, Ar (D)
Chicot Landing, Ar (D)
Lake
Providence
ARKANSAS
LOUISIANA
Memphis
Lake Ouachita
Hot
Springs
Lake
Greeson
De Gray
Lake
White
River
Arkabutla Lake
Sardis Lake
Enid Lake
Grenada Lake
Camden
Ouachita
Greenville
Texarkana
ARKANSAS
PROJECT
LOCATION
Lake
Providence
Monroe
Shreveport
MISSISSIPPI
Vicksburg
Red
River
LOUISIANA
Mississippi
River
Natchez
Alexandria
Baton Rouge
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available
For The Current Fiscal Year.
Work Proposed With Funds Requested
For The Budget Fiscal Year.
Work Required To Complete Project
After The Budget Fiscal Year.
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
NOTE:
(R) = Revetment
(D) = Dike
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AK, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 2 OF 4


MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
Vicksburg
Belle Island, Ms (R)
Yazoo River
Grand Gulf, Ms (R)
Goldbottom, Ms (R)
Ajax Bar, MS (D)
False Point, LA (D)
Milliken Bend, La (R)
Lake Providence
Willow Cutoff, La (D)
Togo Island, LA (R)
Cottonwood, La (D)
Hardscrabble, La (R)
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
NOTE:
(R) = Revetment
(D) = Dike
VICINITY MAP
PROJECT LOCATION
ARKANSAS
MISSISSIPPI
LOUISIANA
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AR, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 3 OF 4


MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
Cottage Bend, MS (D)
Ashland, MS (R)
Natchez
Glasscock, LA (R)
Cottage Bend, MS (D)
LOUISIANA
MISSISSIPPI
Old River
Red River
VICINITY MAP
Memphis
Arkabutla Lake
Sardis Lake
Enid Lake
Grenada Lake
Lake Ouachita
Hot Springs
De Gray Lake
Camden
Greenville
ARKANSAS
Lake Providence
Monroe
Shreveport
MISSISSIPPI
Vicksburg
LOUISIANA
Natchez
PROJECT LOCATION
Alexandria
Baton Rouge
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
NOTE:
(R) = Revetment
(D) = Dike
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 4 OF 4


LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2017.
WORK PROPOSED WITH FUNDS AVAILABLE FOR THE BUDGET FISCAL YEAR 2018.
ARKANSAS
MISSISSIPPI
PROJECT LOCATION
TEXAS
LOUISIANA
SHREVEPORT
MONROE
VICKSBURG
ALEXANDRIA
LAKE CHARLES
BATON ROUGE
NEW ORLEANS
MORGAN CITY
GULF OF MEXICO
VICINITY MAP
SCALE OF MILES
MISSISSIPPI
LOUISIANA
SPRINGFIELD, LA., DIKES
BATON ROUGE
Red River
Old River
Mississippi River
Atchafalaya River
330
320
310
300
290
280
270
260
250
240
230
220
200
MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
330 MISSISSIPPI RIVER MILEAGE
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
CHANNEL IMPROVEMENT
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION

SHEET 1 OF 2


LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2017.
WORK PROPOSED WITH FUNDS AVAILABLE FOR THE BUDGET FISCAL YEAR 2018.
BATON ROUGE
Lake Pontchartrain
NEW ORLEANS
220
200
180
160
140
120
100
80
60
40
20
0
GRETNA BEND REVETMENT
ENGLISH TURN REVETMENT
HARLEM REVETMENT
ENGLISH TURN REVETMENT
TROPICAL BEND REVETMENT
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
GULF OF MEXICO
VICINITY MAP
SCALE OF MILES
MAP SYMBOLS
EXISTING LEVEE
REVETMENT
FORESHORE PROTECTION
330 MISSISSIPPI RIVER MILEAGE
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
CHANNEL IMPROVEMENT
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION

SHEET 2 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN – Construction, Fiscal Year 2018

PROJECT: Lower Mississippi River Main Stem (Flood Damage Reduction) (Continuing)

LOCATION: The Lower Mississippi River Main Stem (LMRMS) Project is located in the Lower Mississippi River and along its banks, from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, which is a distance of approximately 966 miles; and in an area of approximately 595,000 acres in the Atchafalaya River basin, bounded on the east and west by the East and West Atchafalaya Basin Levees, in southeast Louisiana.

Construction of four flood damage reduction features of the LMRMS project is ongoing:

(1) The Mississippi River Levees (MRL) feature of the LMRMS project is located along both banks of the Lower Mississippi River, from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, which is a distance of approximately 966 miles, except where interrupted by hills or tributary streams. On the west bank of the Lower Mississippi River, the MRL feature extends from Allenville, Missouri, on the Little River Diversion Channel generally southward to the vicinity of Venice, Louisiana. On the east bank of the Lower Mississippi River, it extends from Hickman, Kentucky, to opposite Venice, Louisiana. Included in this feature are the levees which reduce the risk of flood damage in Mounds, Mound City, and Cairo, Illinois, and the New Madrid Levee and Floodway.

(2) The Channel Improvement feature of the LMRMS project is located in the Mississippi River and along its banks from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, which is a distance of approximately 966 miles.

(3) The Atchafalaya Basin feature of the LMRMS project is roughly 15 miles wide and 110 miles long, and extends generally from the latitude of Old River to the Gulf of Mexico. It is located in south-central Louisiana below the latitude of Old River, and is west of and generally parallel to the Mississippi River. The Atchafalaya River flows through the middle of this floodway. This feature of the project includes the West Atchafalaya Floodway, the Morganza Floodway, and the Lower Atchafalaya Basin Floodway.

(4) The Atchafalaya Basin Floodway (ABF) feature of the LMRMS project is located in south-central Louisiana and encompasses approximately 595,000 acres in an area bounded on the north by south right-of-way line of the Union Pacific Railroad (just south of US Hwy 190 passing through Krotz Springs, Louisiana); on the south by Morgan City; and on the east and west by the East and West Atchafalaya Basin Levees.

DESCRIPTION: Construction of four flood damage reduction features of the LMRMS project is ongoing. These are four integrated elements of a single project, which operate together (along with other, completed features) as a single system:

(1) Construction of the MRL feature consists of raising, strengthening, and in some cases, extending existing levees to reduce the risk of flood damage in the project flood in Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee. This feature includes 1,595 miles of levees and 14.8 miles of floodwall totaling 1,609.8 miles. All work is programmed.

(2) Construction of the Channel Improvement feature consists of stabilizing the banks of the Lower Mississippi River by means of revetments and foreshore protection in Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee. All work is programmed.

(3) Construction of the Atchafalaya Basin feature consists of construction work on the levied floodways of this basin. The Morganza Floodway, which is to the east of the Atchafalaya River, has a capacity of 600,000 cubic feet per second (cfs), which can be introduced into the floodway by a gated control structure. The West Atchafalaya Basin Floodway, which is to the west of the Atchafalaya River, is placed into operation when the fuse plug sections are overtopped bringing flows from the river that will introduce 900,000 cfs into the lower basin. After passing through the floodways, the flood waters enter the Gulf of Mexico through the Lower Atchafalaya River at Morgan City and the Wax Lake Outlet channel constructed west of Patterson, Louisiana. All work is programmed.

(4) Construction of the ABF feature consists of acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway for flood control, environmental protection, developmental control, public access, and recreation. It also has involved the construction of two pilot water management units, along with miscellaneous canal closures and water circulation improvements, and may involve implementation of future units at the discretion of the Chief of Engineers. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1934, 1936, 1938, 1941, 1944, 1946, 1950, 1954, 1962, 1965, 1966, 1968, and 1970, River Basin Monetary Authorization Act of 1971, Supplemental Appropriations Act, 1985; Water Resources Development Act (WRDA), 1986; Energy and Water Development Appropriations Act, 1988; Energy and Water Development Appropriations Act, 1991; WRDA 1992; Energy and Water Development Appropriations Act, 1997; WRDA, 2000, and Water Resources Development Act of 2007.

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.18 to 1 at 7 percent. The benefit-cost ratio is based on all of the features that comprise the LMRMS project, including features that have completed construction.

INITIAL BENEFIT-COST RATIO: This project was authorized in Fiscal Year 1928 and initial construction funds were provided in FY 1928. The authorized comprehensive review of the project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, provides a base estimate of the benefit-cost ratio for the LMRMS project. On that basis, the benefit-cost ratio for these features computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

| LMRMS PROJECT (FLOOD DAMAGE REDUCTION) 1/<br>SUMMARIZED FINANCIAL DATA | | | | ACCUM PCT OF EST FED COST | STATUS (15 January 2016) | PCT CMPL | PHYSICAL COMPLETION SCHEDULE |
|---|---|---|---|---|---|---|---|
| Estimated Federal Cost | | $ 10,384,470,000 | | | Channel Improvement | 93 | TBD |
| Estimated Non-Federal Cost | | 179,738,000 | | | | | |
| Cash Contributions | 65,793,000 | | | | MRL | 94 | TBD |
| Other Costs | 113,271,000 | | | | | | |
| Reimbursements | 674,000 | | | | Atchafalaya Basin | 96 | TBD |
| Recreation Facilities | 674,000 | | | | | | |
| Total Estimated Project Cost | | $ 10,564,208,000 | | | | | |
| Authorized Cost (plus inflation) | | N/A | | | | | |
| Maximum Cost Limit (Section 902) | | N/A | | | | | |
| | | | | | ABF | | TBD |
| | | | | | Land Acquisition | 60 | |
| | | | | | Management Units | 7 | |
| Allocations to 30 September 2014 | | 6,000,408,000 | | | Entire Project | 34 | |
| Allocation for FY 2015 | | 80,838,000 | | | | | |
| Allocation for FY 2016 | | 78,021,000 | | | | | |
| Allocations for FY 2017 | | 149,069,000 | | | | | |
| Allocations through FY 2017 | | 6,308,336,000 | 1/2/3/4/ | 61 | | | |
| Estimated Unobligated Carry-in Funds | | 5,877,000 | 5/ | | | | |
| President's Budget Amount for FY 2018 | | 93,401,000 | | 62 | | | |
| Programmed Balance to Complete After FY 2018 | | 3,982,733,000 | | | | | |
| Un-programmed Balance to Complete After FY 2018 | | 0 | | | | | |

1/ Total costs and allocation through FY 2015 includes commercial navigation funding of the channel improvement feature
2/ $0 reprogrammed to (from) the project.
3/ $0 rescinded from the project.
4/ $0 transferred to the Flood Control and Coastal Emergencies account.
5/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $24,034,000, including $18,157,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.

| MISSISSIPPI RIVER LEVEES – FLOOD DAMAGE REDUCTION<br>SUMMARIZED FINANCIAL DATA | | | | ACCUM PCT OF EST FED COST | STATUS (15 January 2016 ) | PCT CMPL | PHYSICAL COMPLETION SCHEDULE |
|---|---|---|---|---|---|---|---|
| Estimated Total Appropriation Requirement | | $ 2,598,268,000 | | | Entire Project | 94 | TBD |
| Future Non-Federal Reimbursement | | 674,000 | | | | | |
| Estimated Federal Cost (Ultimate) | | 2,598,268,000 | | | | | |
| Estimated Non-Federal Cost | | 99,212,000 | | | | | |
| Cash Contributions | $ 3,373,000 | | | | | | |
| Other Costs | 95,165,000 | | | | | | |
| Reimbursement | 674,000 | | | | | | |
| Recreation Facilities | 674,000 | | | | | | |
| Total Estimated Project Cost | | $2,697,480,000 | | | | | |
| Allocations to 30 September 2014 | | $ 1,544,275,000 | | | | | |
| Allocation for FY 2015 | | 35,147,000 | | | | | |
| Allocation for FY 2016 | | 20,559,000 | | | | | |
| Allocation for FY 2017 | | 88,623,000 | 1/ | | | | |
| Allocations through FY 2017 | | 1,688,604,000 | 2/ 3/ 4/ | 65 | | | |
| Estimated Unobligated Carry-in Funds | | 4,905,000 | 5/ | | | | |
| President's Budget for FY 2018 | | 27,750,000 | | 66 | | | |
| Programmed Balance to Complete After FY 2018 | | $883,914,000 | | | | | |
| Un-programmed Balance to Complete After FY 2018 | | 0 | | | | | |

1/ Includes $44,590,000 of Public Law 114-254 supplemental funds.
2/ $0 reprogrammed to the project.
3/ $0 rescinded from the project.
4/ $0 transferred to the Flood Control and Coastal Emergencies account.
5/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $4,905,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort are $0.

CHANNEL IMPROVEMENT – FLOOD DAMAGE REDUCTION
SUMMARIZED FINANCIAL DATA

| | | ACCUM PCT OF EST FED COST | STATUS (15 January 2016) | PCT CMPL | PHYSICAL COMPLETION SCHEDULE |
|---|---|---|---|---|---|
| | $4,161,158,000 | | Entire Project | 93 | TBD |
| Estimated Federal Cost | | | | | |
| Estimated Non-Federal Cost | 1,870,000 | | | | |
| Cash Contributions | 1,770,000 | | | | |
| Other Costs | 100,000 | | | | |
| Total Estimated Project Cost | $4,163,028,000 | | | | |
| Allocations to 30 September 2014 | 3,214,240,000 | | | | |
| Allocation for FY 2015 | 40,861,000 | | | | |
| Allocation for FY 2016 | 53,595,000 | | | | |
| Allocation for FY 2017 | 49,241,000 | | | | |
| Allocations through FY 2017 | 3,357,937,000 | 1/ 2/ 3/ 4/ | 81 | | |
| Estimated Unobligated Carry-In Funds | 85,000 | 5/ | | | |
| President's Budget for FY 2018 | 65,501,000 | | 82 | | |
| Programmed Balance to Complete After FY 2018 | 737,720,000 | | | | |
| Unprogrammed Balance to Complete After FY 2018 | 0 | | | | |

1/ Total costs and allocation through FY 2016 includes commercial navigation funding of the channel improvement feature
2/ $0 reprogrammed to (from) the project.
3/ $0 rescinded from the project.
4/ $0 transferred to the Flood Control and Coastal Emergencies account.
5/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $18,242,000, including $18,157,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.

ATCHAFALAYA BASIN
SUMMARIZED FINANCIAL DATA

| | | | ACCUM PCT OF EST FED COST | STATUS (15 January 2016) | PCT CMPL | PHYSICAL COMPLETION SCHEDULE |
|---|---|---|---|---|---|---|
| Estimated Federal Cost | $3,379,444,000 | | | | | |
| | | | | Entire Project | 96 | TBD |
| Estimated Non-Federal Cost | $ 19,556,000 | | | | Physical | |
| Cash Contributions | $ 2,500,000 | | | | | |
| Other Costs | 17,056,000 | | | | | |
| Total Estimated Project Cost | $3,399,000,000 | | | | | |
| Allocations to 30 September 2014 | $1,092,071,000 | | | | | |
| Allocation for FY 2015 | 2,505,000 | | | | | |
| Allocation for FY 2016 | 2,709,000 | | | | | |
| Allocation for FY 2017 | 10,605,000 | 1/2/3/ | | | | |
| Allocations through FY 2017 | $1,107,890,000 | 4/ | 33 | | | |
| Estimated Unobligated Carry-In Funds | 303,000 | | | | | |
| President's Budget for FY 2018 | 1,500,000 | | 33 | | | |
| Programmed Balance to Complete after FY 2018 | $2,270,054,000 | | | | | |
| Un-programmed Balance to Complete after FY 2018 | 0 | | | | | |

1/ $0 reprogrammed to (from) the project.
2/ $0 rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $303,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.

ATCHAFALAYA BASIN FLOODWAY SYSTEM
SUMMARIZED FINANCIAL DATA

| | | | ACCUM PCT OF EST FED COST | STATUS (15 January 2016) | PCT CMPL | PHYSICAL COMPLETION SCHEDULE |
|---|---|---|---|---|---|---|
| Estimated Federal Cost | $245,600,000 | | | Land Acquisition | 60 | TBD |
| Estimated Non-Federal Cost | 59,100,000 | | | Management Units | 7 | TBD |
| Cash Contribution $58,150,000 | | | | Entire Project | 34 | TBD |
| Other Costs $950,000 | | | | | | |
| Total Estimated Project Cost | $304,700,000 | | | | | |
| Allocations thru 30 September 2014 | 149,822,000 | | | | | |
| Allocation for FY 2015 | 2,325,000 | | | | | |
| Allocation for FY 2016 | 1,158,000 | | | | | |
| Allocation for FY 2017 | 600,000 | | | | | |
| Allocations through FY 2017 | 153,905,000 | 1/ 2/ 3/ | 63 | | | |
| Estimated Unobligated Carry-In Funds | 584,000 | 4/ | | | | |
| President's Budget for FY 2018 | 650,000 | | 63 | | | |
| Programmed Balance to Complete after FY 2018 | 91,045,000 | | | | | |
| Un-programmed Balance to Complete after FY 2018 | 0 | | | | | |

1/ $0 reprogrammed to (from) the project.
2/ $0 rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Unobligated Carry-In Funding: The actual unobligated balance from FY 2016 into FY 2017 for this effort was $584,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this project is $0.

PHYSICAL DATA:

The MRL feature encompasses 72 miles of channels and canals. The total length of its levees equals 1,595 miles and range in height from 20 to 35 feet. There are 14.8 miles of floodwall ranging from 14 to 23 feet in height. There are also 654.8 miles of berm, 541.6 miles of levee road, and 5 pump stations within this feature of the project.

The Channel Improvement feature consists of 19,135 acres of land and damages; 1,097 miles of revetments; 362 miles of dikes; and 1 pumping station.

The Atchafalaya Basin feature consists of 449 miles of levees at an average height of 20'; 20 miles of railroad and 15 miles of road relocations; 9 drainage structures that include Point Coupe (2 gates, 10.5 by 15 feet), Melville (2 - 72-inch corrugated metal pipe with vertical lift gate), Darbonne (10-foot by 10-foot barrel with vertical lift gate), Bayou des Glaises (72-inch corrugated metal pipe with flap gate), Bayou Courtableau (2 weirs, 503 feet long), Brushy Bayou (5-foot by 6-foot barrel with vertical lift gate), Bayou Courtableau (5-barrel, each 10 feet by 15 feet with vertical lift gate), Wax Lake East (25 pipes, 5 feet in diameter with slide gates, Wax Lake West (15 pipes, 5 feet in diameter with slide gates); 289,212 acres of Lands and Damages; 15 pumping stations with a minimum capacity of 50 cfs, a Maximum capacity of 1,500 cfs, and an average capacity of 400 cfs; 58 miles of bank stabilization; 3 floodgates that include Charenton - Sector-gates, 45 feet wide, East Calumet - sector-gates, 45 feet wide, and West Calumet - sector-gates, 45 feet wide; 147.1 miles of channels; 3 locks that include Bayou Boeuf, 75 feet by 1,156 feet, earth chamber, Bayou Sorrel, 56 feet by 797 feet, earth chamber, and Berwick, 45 feet by 300 feet, concrete chamber; 10.1 miles of new channel river navigation; 2 planned freshwater control structures that include Sherburne - dual 10-foot by 10-foot reinforced concrete box culverts with gates and Henderson - dual 10-foot by 10-foot reinforced concrete box culverts with gates.

The ABF feature consists of 388,000 acres recreation facilities; 3 campgrounds; 7 primitive campgrounds; 15 two-lane boat launching ramps; one visitor center and numerous trails.

JUSTIFICATION:

The LMRMS project is designed to safely convey a Project Design Flood (PDF) from Cairo, IL to the Gulf of Mexico via the main river channels, floodways, and backwater areas. At the latitude of the Old River Control Complex (ORCC), Louisiana, the PDF flows total 3.030,000 cfs. From the ORCC to the Morganza Floodway, the LMRMS project will convey up to 2,100,000 cfs for the PDF in the Mississippi River. Below the Morganza Floodway, the LMRMS Project will contain 1,500,000 cfs within the Mississippi River without threatening the integrity of the levees along its banks which protect densely populated areas, highly developed agricultural lands, and industries along the river until it reaches the Bonnet Carre Spillway (about 30 miles upstream of New Orleans). At Bonnet Carre, 250,000 cfs are diverted to Lake Pontchartrain for the PDF with the remaining flows passing via the Mississippi River to the Gulf of Mexico including passing the City of New Orleans. With respect to the Atchafalaya Floodway, the LMRMS Project is designed to pass up to 1,500,000 cfs which includes the Red/Ouachita/Black watershed flows and diverted flows via the ORCC (620,000 cfs) and the Morganza Floodway (600,000 cfs) for the PDF. In order to prevent diverted waters from spreading over the rich and highly developed agricultural lands within the Atchafalaya Basin, these rivers and floodways have been leveed to confine the diverted flow.

The Mississippi River, with a drainage area of about 1,245,000 square miles, has a wide range of flow, increasing from an approximate minimum of 90,000 cubic feet per second (675,000 gallons per second) to a maximum of 2,345,000 cubic feet per second (17,587,000 gallons per second) which occurred in 1927 at the latitude of Red River Landing. The project flood is 3,030,000 cubic feet per second (22,500,000 gallons per second). Part of the tremendous energy of this volume of flowing water is directed toward a relentless attack on the banks of the river, causing the unprotected banks to cave

into the river. As these caving progresses, the attack becomes more direct, the bendway moves in toward the levee, and more sediment is placed in the river and deposited downstream in the form of a sandbar. This bar gradually builds out into the channel and deflects the river's attack to the opposite bank. As the cycle is repeated the river tends to meander and lengthen. Revetment is placed against the banks of the river at locations where mainline levees are being threatened with destruction or where unsatisfactory alignment and channel conditions are developing. Revetment serves a three-fold purpose in that the river is prevented from encroaching on the Main Stem levees, excess material is kept out of the stream, and a favorable channel alignment and depth are maintained. An objective of the plan is to preserve favorable alignments and efficient cross-sectional areas and to prevent the river from creating new meander patterns. In wide reaches of the river, dikes are used to contract the channel width so as to produce an efficient channel for navigation and to insure the flood carrying capacity of the river. Chutes and secondary channels are controlled for the same purpose. Improvement dredging is employed to assist the river in removing natural obstructions which deflect the current into undesirable patterns of flow and to assist in developing an efficient channel. Foreshore protection is utilized to preserve the integrity of the Mississippi River Levees from attack by erosion of the batture. Erosion of the batture leads to steep slopes which, when undermined, result in considerable loss of batture and possible failure of the levee.

The area subject to flooding in the project flood assuming no flood damage reduction works is 22,700,000 acres. The area for which the completed project would reduce the flood risk is 15,100,000 acres. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10,600,000 acres of agricultural lands, and 6,500,000 acres of woodland and marshland. The estimated value of these lands and improvements is $542.4 billion in 2016 dollars.

The LMRMS project was authorized by the Flood Control Act of 1928 after the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of $347,000,000. This would be equivalent to $17,600,000,000 in damages in 2016 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10,800,000 acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19,800,000 acres would have been inundated. Total damages with existing projects in operation were $643,000,000 (1973 price levels). Damages without projects would have been $11,300,000,000 and total damages prevented by projects amounted to $10,600,000,000. Expressed in 2016 prices, damages without the projects would have been $63,800,000,000 and damages prevented would have been $60,300,000,000.

The 2011 flood set a new flood of record based on a comparison of peak flows measured at representative locations in the lower Mississippi Valley versus previous flood records. In addition, this flood experienced greater stages than the 1927 flood, but since the levees did not crevasse or overtop flooding was reduced by 62 percent. Total damages with existing projects in operation were $2,800,000,000 (2011 price levels). In addition, $1,500,000,000 damages were incurred by Federal flood protection works within the watershed of the Lower Mississippi River and its tributaries. Damages without these projects would have been $236,900,000,000 and total damages prevented by projects amounted to $234,100,000,000. Households numbering more than 974,000 were saved from impacts and no known deaths occurred. Expressed in 2016 prices, damages without the projects would have been $260.7 billion and damages prevented would have been $257.5 billion.

The LMRMS project reduces the flood risk to 35,000 square miles and, to a lesser extent, to an additional 3,780 square miles in the alluvial valley subject to flooding by the project flood. The alluvial valley is over 650 miles long and varies in width from 20 to 90 miles. Numerous railroads, highways, and airfields connecting the major transportation centers lie within the protected area as do several major transcontinental communication routes. In addition

to highly developed agricultural areas, the LMRMS project benefits urban areas and many industries. Since its construction began, farms and industries have developed in the adjacent areas. Therefore, overtopping or crevassing of the levees would cause far more damage than anticipated at the start of project construction. The main stem levees in the lower reaches include levees that are deficient because of consolidation of the soft underlying soils, especially those below the latitude of Krotz Springs, LA. Construction of these levees to the approved grade would reduce the risk of flood damage and provide a more reliable means of access for the movement of manpower and equipment to any spot in that area threatened by floods.

The Atchafalaya Basin and Floodway features resulted from a comprehensive study with a view to developing a plan for the enhancement, management, and preservation of the water quality and related land resources of the Atchafalaya River Basin, Louisiana, which would include provisions for reductions of siltation, improvement of water quality, and possible improvements of the area for commercial and sport fishing. The Atchafalaya Basin Floodway feature, which is an integral part of the overall flood damage reduction plan of the LMRMS, includes real estate acquisition of lands, flowage easements, and developmental control easements in the floodway south of Krotz Springs, Louisiana, to ensure unhampered use of the floodway during major floods; and environmental protection easements to protect the basin's environmental resources. Provision of additional public access and several campgrounds, boat launching ramps, visitors' center, and other recreational facilities are also authorized. The water management units' feature involves making use of distinct and unique hydrologic units within the floodway to improve historical (where practical) overflow conditions and thereby enhance aquatic ecosystem productivity. The benefits of the Atchafalaya Basin Floodway are derived from the way in which they operate together with all other features of the LMRMS project when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan. This floodway feature is, for all practical purposes, a part of the main river system, in as much as the integrity of the main river system depends upon its utilization.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual remaining benefits for the composite of Main Stem features are as follows:

| Annual Remaining Benefits | Amount |
|---|---|
| Flood Control | $415,336,000 |
| Navigation | 109,522,000 |
| Area Redevelopment | 1,587,000 |
| Recreation | 2,645,000 |
| Total | $529,090,000 |

FISCAL YEAR 2017: The appropriated amount, plus carry-in funds, is being applied as follows:

MRL FEATURE

| | |
|---|---|
| Baton Rouge Phase IV | $ 5,100,000 |
| Birds Point New Madrid Borrow Pits Land Acquisition | 1,500,000 |
| Leland-Vaucluse, AR 536R | 8,050,000 |
| Magna Vista-Brunswick, MS Paving 463L | 2,013,000 |
| Bayou Vidal – Elkridge, LA 416R | 7,820,000 |
| Magna Vista-Brunswick, MS Paving 468L | 2,000,000 |
| Gaines Landing 546R | 2,300,000 |
| Planning, Engineering and Design | 7,155,000 |
| Supervision and Administration | 12,061,000 |
| Land and Damages | 939,000 |
| Supplemental P.L. 114-254 (Repair Cost) | $44,590,000 |
| Total | $93,528,000 |

CHANNEL IMPROVEMENT FEATURE

| | |
|---|---|
| Revetments | $49,326,000 |
| Total | $49,326,000 |

The items of revetment work are:

| | Approximate length in feet: |
|---|---|
| Ensley, TN | 2,000 |
| Hopefield, AR | 500 |
| Gretna Bend | 5,000 |
| Reinforcements | 11,600 |
| Presidents Island | 1,500 |

Revetments: The planned revetment work consists of the following items of work for which funds are being used as follows:

Continue:

| | |
|---|---|
| Lands and Damages | $ 189,000 |
| Construction of Revetments | 33,138,000 |
| Cultural Resources | 95,000 |
| Planning, Design and construction of new Mat Sinking Unit (Armor One) | 8,150,000 |
| Planning, Engineering, and Design | 6,950,000 |
| Construction Management | 804,000 |
| Total Revetment | $49,326,000 |

ATCHAFALAYA BASIN FEATURE

| | |
|---|---|
| Award North Bend phase B construction contract | $8,100,000 |
| Planning, Engineering, and Design | $2,808,000 |
| Total | $10,908,000 |

ATCHAFALAYA BASIN FLOODWAY FEATURE

| | |
|---|---|
| Continue: | |
| Land and damages | $150,000 |
| SEIS Recreation | 84,000 |
| Required Monitoring Activities | 600,000 |
| Planning, Engineering, and Design (element 10) | 350,000 |
| Total | $1,184,000 |

FISCAL YEAR 2018: The budgeted amount will be applied as follows:

MISSISSIPPI RIVER LEVEES FEATURE

Initiate:

| | |
|---|---|
| Items 468L/463L, Magna Vista-Brunswick, MS East Bank Paving | $1,750,000 |
| Item 416-R, Bayou Vidal – Elkridge, LA Levee Enlargement | 5,500,000 |
| Upper 5th Reach B | 4,100,000 |

Continue:

| | |
|---|---|
| Planning, Engineering, and Design | 4,000,000 |
| Construction Management | 10,400,000 |
| Total | $25,750,000 |

CHANNEL IMPROVEMENT FEATURE

| | |
|---|---|
| Revetments | $65,501,000 |
| Total | $65,501,000 |

Revetments: The planned revetment work consists of the following items:

The items of new revetment work are:

| | |
|---|---|
| Harlem, LA ACM | 9,019,000 |
| President's Island | 2,100,000 |

The items of reinforcement construction work are:

| | |
|---|---|
| Peters, AR ACM | 2,520,000 |
| Rescue, MS ACM | 2,940,000 |
| Hickman-Reelfoot, KY ACM | 5,320,000 |
| Eutaw, MS ACM | 6,720,000 |
| Total Revetment Construction | $28,619,000 |
| New Articulated Concrete Mat Sinking Unit | $27,982,000 |
| Construction of Revetment | 3,000,000 |
| Planning, Engineering, and Design | 5,900,000 |
| Total Revetment | $65,501,000 |

ATCHAFALAYA BASIN FEATURE

| | |
|---|---|
| Planning Engineering and Design | $1,500,000 |
| Total | $1,500,000 |

ATCHAFALAYA BASIN FLOODWAY SYSTEM FEATURE:

| | |
|---|---|
| Lands and Damages | $100,000 |
| Required Monitoring Activities | 550,000 |
| Total | $650,000 |

NON-FEDERAL COST: In accordance with the Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1946, 1950, 1954, 1962, 1965, 1968 and WRDA 1986. The Non-Federal sponsor must comply with the requirements listed below:

| Requirements of Local Cooperation | Payments During Construction and Reimbursements | | Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs |
|---|---|---|---|
| Mississippi River Levees: | | | |
| Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas. | $95,165,000 | | |
| Minor maintenance of all flood control works after their completion, except controlling a regulating spillway structures, including special relief levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to mainline river levees. | | | $12,073,000 |
| Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities. | 2,798,000 | | 898,000 |
| Other (levee and revetment construction) | 1,249,000 | | |
| Total Mississippi River Levees Non-Federal Costs | $99,212,000 | | $12,971,000 |
| Channel Improvement: | | | |
| Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal area. | 100,000 | | |
| Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, and replacement of recreation facilities. | 1,770,000 | | $251,000 |
| Total Channel Improvement Non-Federal Costs | $ 1,870,000 | | $251,000 |
| Atchafalaya Basin | | | |
| Bear the administrative costs for furnishing rights-of-way for levee and levee drainage construction; purchase maintenance equipment; and perform miscellaneous levee work. | $ 322,000 | | |
| Agree to accept lands under the provision of Section 4 of the Flood Control Act of 15 May 1928, and as provided in the Flood Control Act of 18 August 1941. | | 0 | |
| Bear costs for and maintain all flood control works after their completion, except controlling and regulating spillway structures, including special levees; maintenance includes normally such matters as cutting | | 0 | 3,700,000 |

| | | |
|---|---|---|
| grass, removal of weeds, local drainage and minor repairs to the levees. | | |
| For the Upper Point Coupee Loop Area, provide an interior drainage system and comply with the applicable provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, and comply with the provision of Section 221 of the Flood Control Act of 1970. | 16,734,000 | |
| The State of Louisiana, through the Department of Transportation and Development as the local sponsor, will provide a voluntary 25 percent cost share for the planning, design, and construction of the interim protection for floodproofing of riverfront businesses in Morgan City and Berwick. | 2,500,000 | |
| Total Atchafalaya Basin Non-Federal Costs | $19,556,000 | $3,700,000 |
| <u>Atchafalaya Basin Floodway System:</u> | | |
| Pay one half of the separable cost allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities. | $34,763,000 | 1,361,000 |
| Provide lands, easements, right-of-way, and dredged material disposal areas for recreation. | 950,000 | |
| Pay 25 percent of construction, operation, and maintenance of Water Management Units. | 23,387,000 | 7,253,000 |
| Total Atchafalaya Basin Floodway System Non-Federal Costs | $59,100,000 | 8,614,000 |
| TOTAL NON-FEDERAL COSTS | $178,869,000 | $25,375,000 |

STATUS OF LOCAL COOPERATION: Mississippi River Levees: It is estimated that local interests had spent approximately $292 million for flood protection prior to the Act of 15 May 1928. After passage of the Act, the 37 levee districts along the Mississippi River adopted resolutions assuring the United States that the requirements of local cooperation will be met. These local interests have acquired all rights-of-way for work completed and underway and will try to provide the rights-of-way for work scheduled for FY 2018. Supplemental assurances covering the requirements of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970 have been accepted for Main Stem Mississippi River Levees in Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee.

Assurances of local cooperation for the recreation facilities at Warfield Point, Mississippi, were accepted on 14 October 1969. Supplemental assurances covering the River and Harbor Act of 1970 and Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970 were accepted 7 August 1972. Assurances have not as yet been requested for the recreation facilities at Mississippi River State Park, Arkansas.

Channel Improvement - Assurances furnished by the Missouri Department of Conservation for the Dorena Recreation Facility were accepted 27 August 1971; assurances furnished by the Tennessee Department of Conservation for the Richardson Landing Recreation Facility were accepted 3 September 1976; and assurances furnished by the City of Memphis, Tennessee, for Volunteer Bicentennial Park were accepted 11 September 1975. Assurances furnished by the City of Osceola, Arkansas, for Lake Neark, Arkansas, are embodied in the contract for cost sharing approved on 19 September 1982. A Local Cooperation Agreement for the Ed Jones Boat Ramp with the State of Tennessee was signed 27 October 1988. A Local Cooperation Agreement for the Shelby Forest Boat Ramp with the State of Tennessee was signed 11 October 1990. A Local Cooperation Agreement for the Dyersburg, Tennessee, Boat Ramp with the State of Tennessee was signed 11 July 1994.

Atchafalaya Basin - Necessary assurances for maintaining the feature have been furnished by the Atchafalaya Basin Levee District; Red River, Atchafalaya and Bayou Boeuf Levee District; St. Mary Parish Government; Pointe Coupee Parish Police Jury; and the towns of Berwick and Morgan City, Louisiana. These agencies are furnishing all requirements of local cooperation necessary for meeting present schedules. Newly formed St. Mary Parish Levee District has expressed interest in serving as the local sponsor for portions of the feature in St. Mary Parish.

Atchafalaya Basin Floodway System - The Avoyelles Parish Police Jury is the non-Federal sponsor for the Simmesport Boat Ramp and the PPA was executed on 18 April 2001. The State of Louisiana has provided a letter of intent supporting the recreation feature and agrees to its cost sharing requirements. The State designated the Department of Natural Resources to be the lead State agency to represent the State in the implementation. An additional sponsor, St. Mary Parish, serves as local sponsor for Myette Point Boat Landing, and the PPA was executed on 18 May 2004. The State of Louisiana, Department of Natural Resources, is also serving as the sponsor for the management units. The PPA for the Buffalo Cove management unit was executed on 16 May 2005.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $10,384,470,000 is an increase of $1,333,764,000 from the latest estimate ($9,050,706,000) presented to Congress (FY 2017). This change includes the following items:

| | |
|---|---|
| ATCHAFALAYA BASIN FEATURE: | |
| Total | $1,163,575,000 |
| CHANNEL IMPROVEMENT (REVETMENTS) FEATURE: | |
| Total | $150,158,000 |
| MISSISSIPPI RIVER LEVEES – FLOOD DAMAGE REDUCTION FEATURE: | |
| Total | $16,031,000 |
| ATCHAFALAYA BASIN FLOODWAY SYSTEM FEATURE: | |
| Price Escalation on Construction Features | $4,000,000 |
| Total | $4,000,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT:

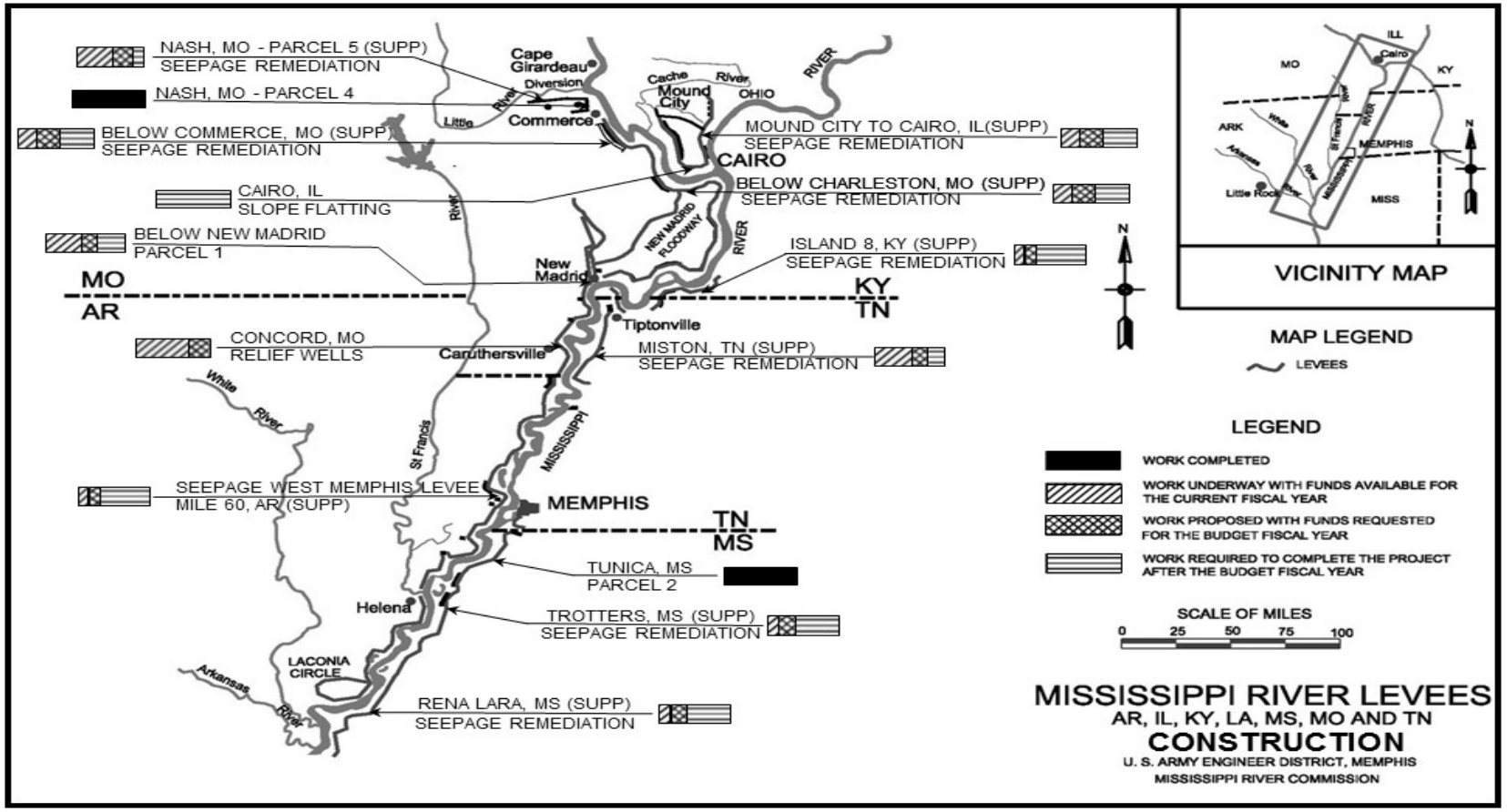
MISSISSIPPI RIVER LEVEES: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976. A Supplemental Environmental Impact Statement for the feature was completed and the Record of Decision was signed on 5 October 1998. The adequacy of the Supplemental Environmental Impact Statement was challenged but upheld by the United States District Court for the Eastern District of Louisiana. The Fifth Circuit Court of Appeals on October 23, 2000, affirmed the district court's grant of summary judgment to the Government.

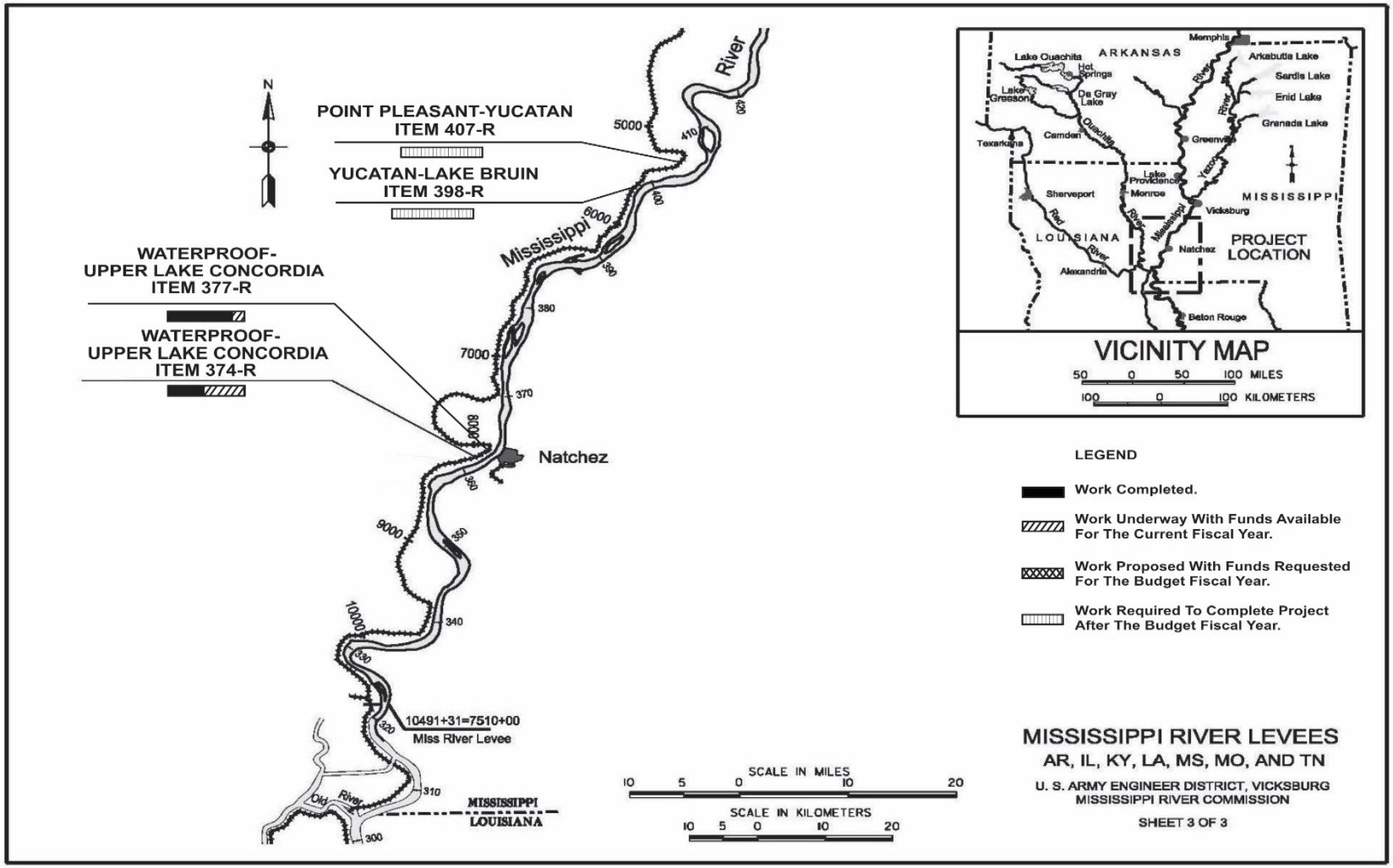
CHANNEL IMPROVEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976.

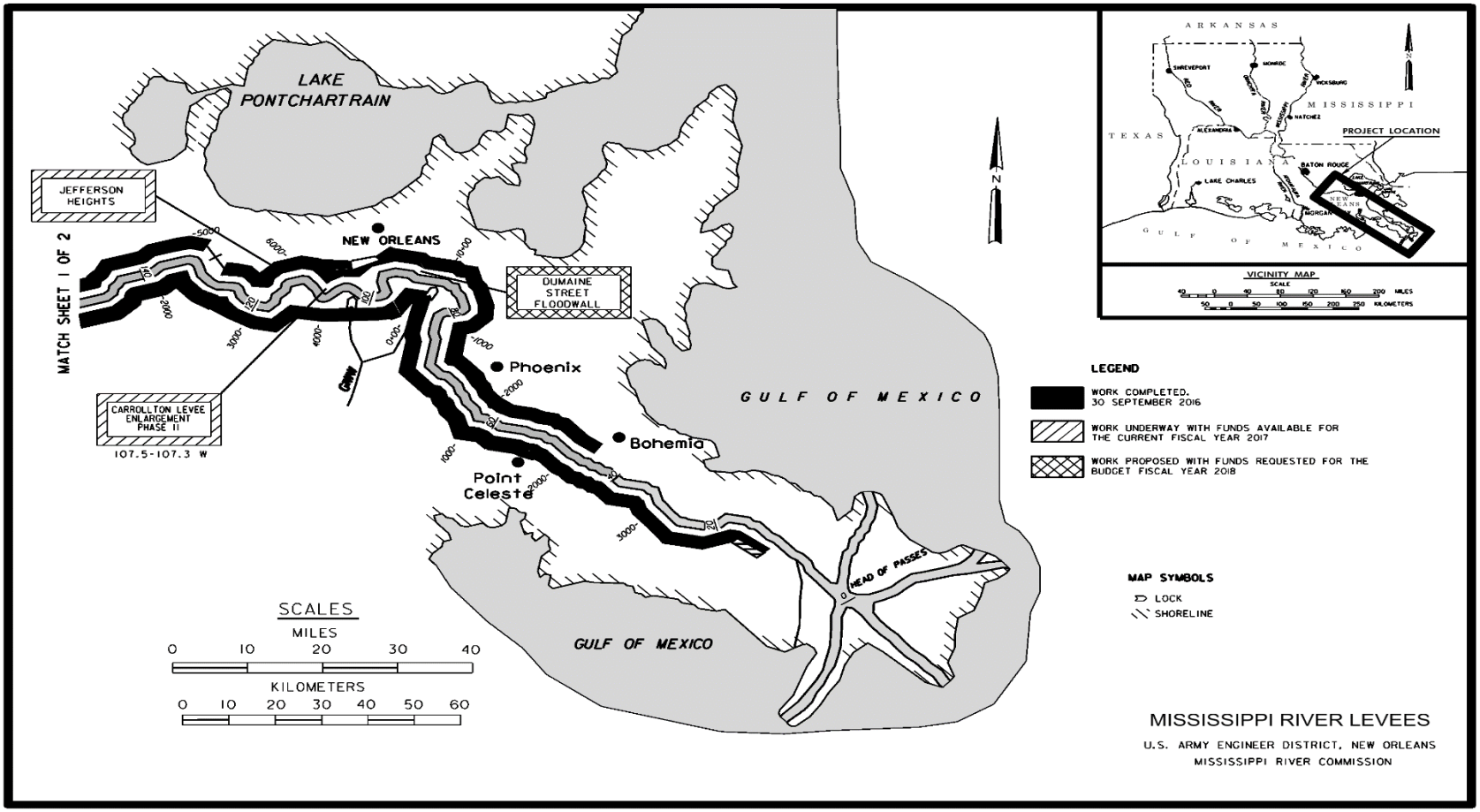
ATCHAFALAYA BASIN: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982. The final Environmental Impact Statement for the Upper Pointe Coupee Loop Area was filed with the Council on Environment Quality on 11 June 1976.

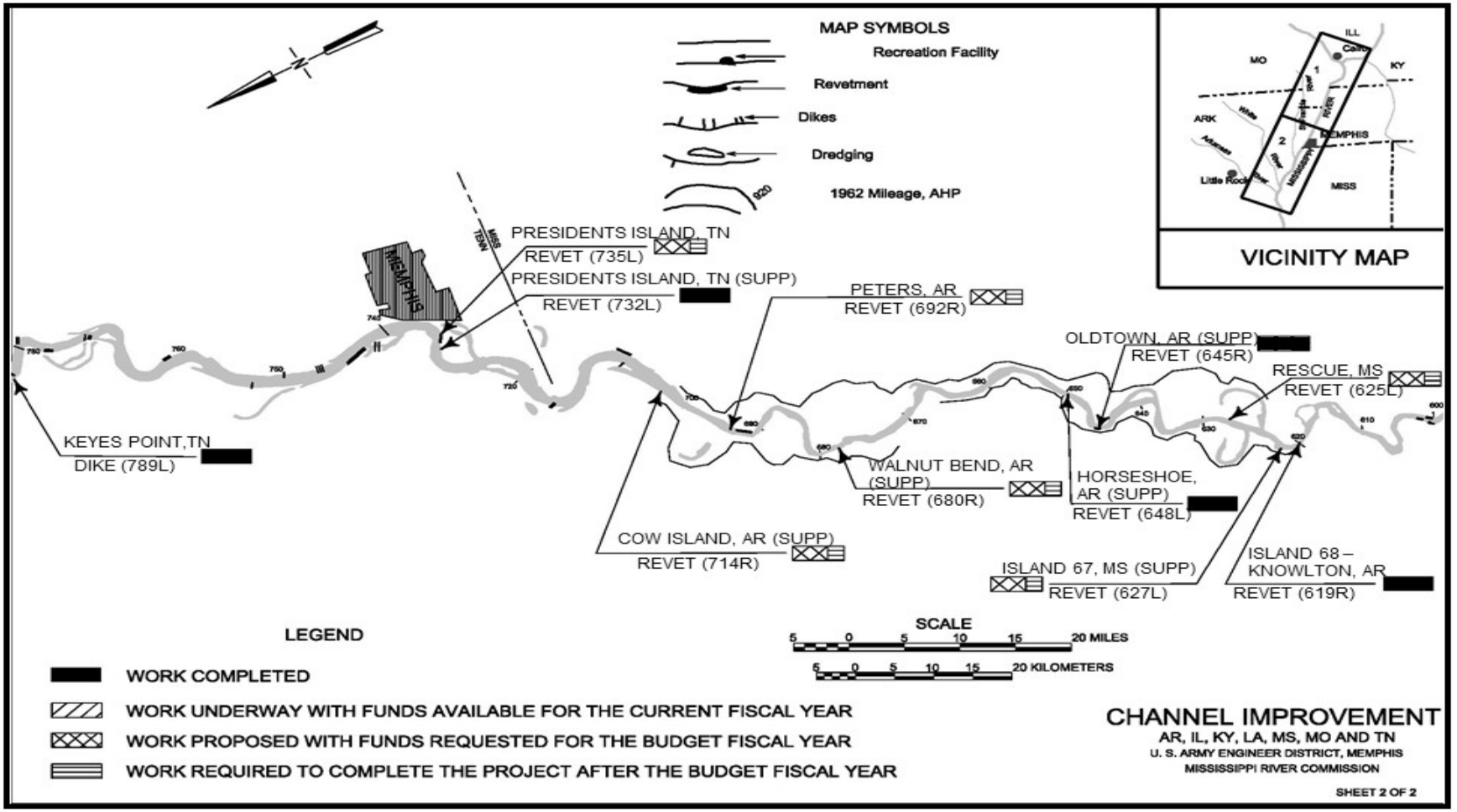
ATCHAFALAYA BASIN FLOODWAY SYSTEM: The final EIS was filed with the Environmental Protection Agency on 20 August 1982. A Supplemental Environmental Impact Statement (SEIS) for Henderson Lake Management Unit and Recreation Feature (combined) was initiated in FY 2008 with anticipated completion and approval in FY 2014. A SEIS for Buffalo Cove, Flat Lake, Beau Bayou, and Cocodrie Swamp has also been initiated with completion paralleling the 5-year monitoring program for Buffalo Cove.

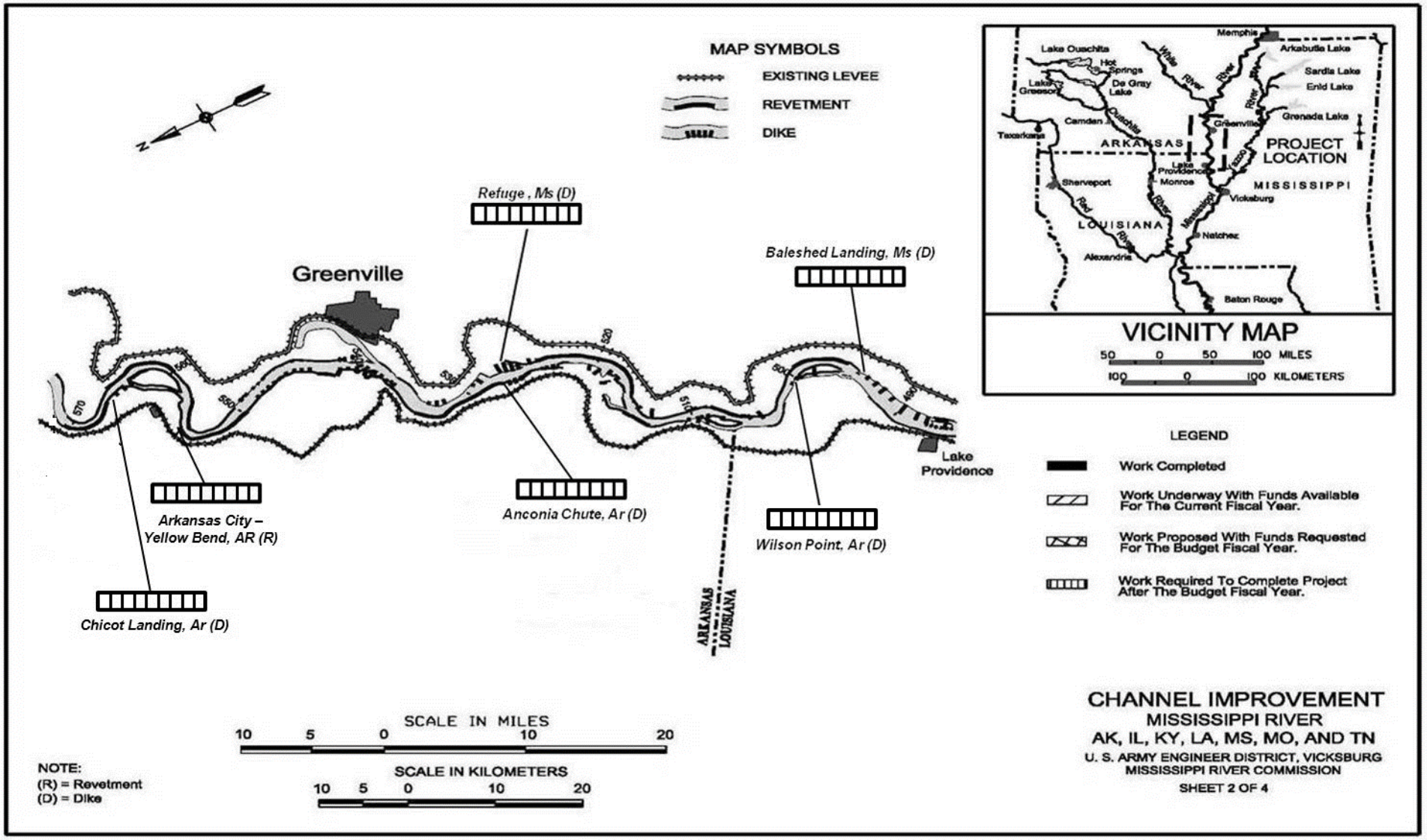
OTHER INFORMATION: Initial construction funds were appropriated in 1928 for Mississippi River Levees, Channel Improvement, and Atchafalaya Basin and in 1985 for Atchafalaya Basin Floodway System.

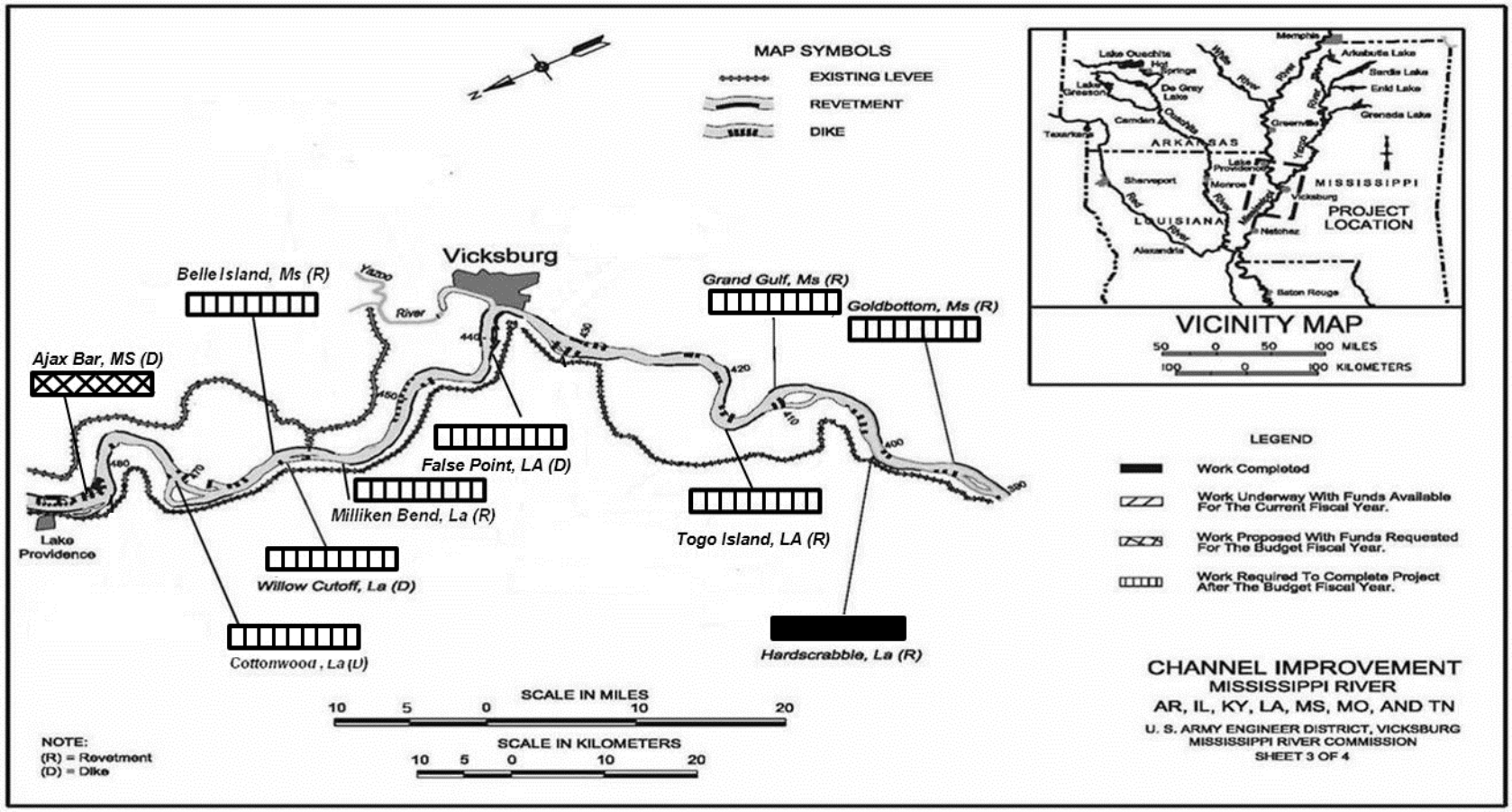

NASH, MO - PARCEL 5 (SUPP)
SEEPAGE REMEDIATION
NASH, MO - PARCEL 4
BELOW COMMERCE, MO (SUPP)
SEEPAGE REMEDIATION
CAIRO, IL
SLOPE FLATTING
BELOW NEW MADRID
PARCEL 1
CONCORD, MO
RELIEF WELLS
SEEPAGE WEST MEMPHIS LEVEE
MILE 60, AR (SUPP)
TUNICA, MS
PARCEL 2
TROTTERS, MS (SUPP)
SEEPAGE REMEDIATION
RENA LARA, MS (SUPP)
SEEPAGE REMEDIATION
MOUND CITY TO CAIRO, IL(SUPP)
SEEPAGE REMEDIATION
BELOW CHARLESTON, MO (SUPP)
SEEPAGE REMEDIATION
ISLAND 8, KY (SUPP)
SEEPAGE REMEDIATION
MISTON, TN (SUPP)
SEEPAGE REMEDIATION
Cape Girardeau
Diversion
Commerce
Mound City
CAIRO
New Madrid
Tiptonville
Caruthersville
Helena
MEMPHIS
LACONIA CIRCLE
NEW MADRID FLOODWAY
MO
AR
KY
TN
MS
Little River
Cache River
OHIO RIVER
White River
St Francis River
MISSISSIPPI RIVER
Arkansas River
N
VICINITY MAP
ILL
Cairo
KY
MO
ARK
White River
St Francis River
MEMPHIS
Arkansas River
Little Rock
Mississippi River
MISS
MAP LEGEND
LEVEES
LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
SCALE OF MILES
0 25 50 75 100
MISSISSIPPI RIVER LEVEES
AR, IL, KY, LA, MS, MO AND TN
CONSTRUCTION
U. S. ARMY ENGINEER DISTRICT, MEMPHIS
MISSISSIPPI RIVER COMMISSION

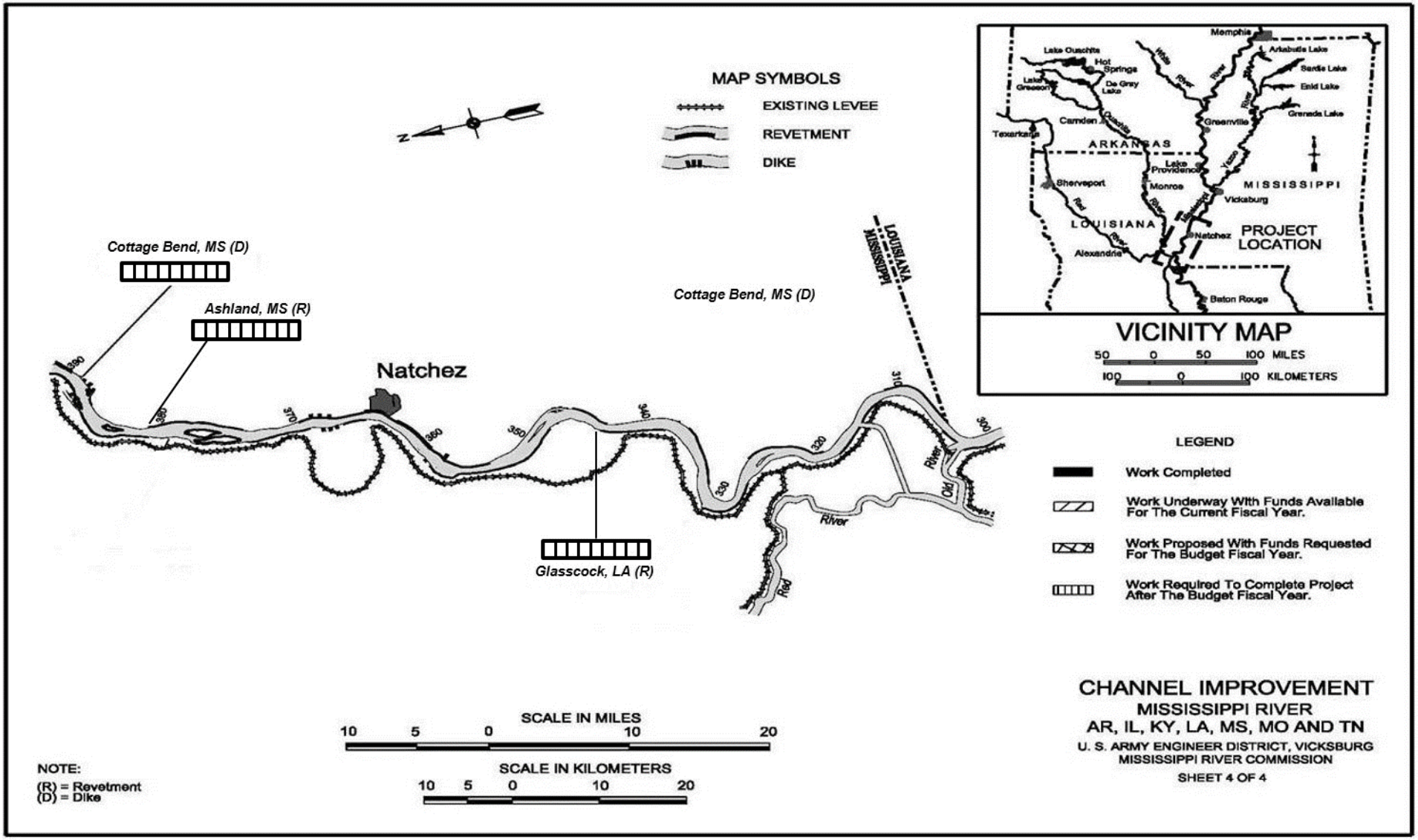

POINT PLEASANT-YUCATAN
ITEM 407-R
YUCATAN-LAKE BRUIN
ITEM 398-R
WATERPROOF-
UPPER LAKE CONCORDIA
ITEM 377-R
WATERPROOF-
UPPER LAKE CONCORDIA
ITEM 374-R
Natchez
10491+31=7510+00
Miss River Levee
Old River
MISSISSIPPI
LOUISIANA
Mississippi River
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
ARKANSAS
LOUISIANA
MISSISSIPPI
PROJECT
LOCATION
Memphis
Lake Ouachita
Hot Springs
Arkabutla Lake
Sardis Lake
Enid Lake
Grenada Lake
De Gray Lake
Lake Greeson
Camden
Texarkana
Greenville
Lake Providence
Monroe
Sherveport
Vicksburg
Natchez
Alexandria
Baton Rouge
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed.
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
MISSISSIPPI RIVER LEVEES
AR, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 3 OF 3

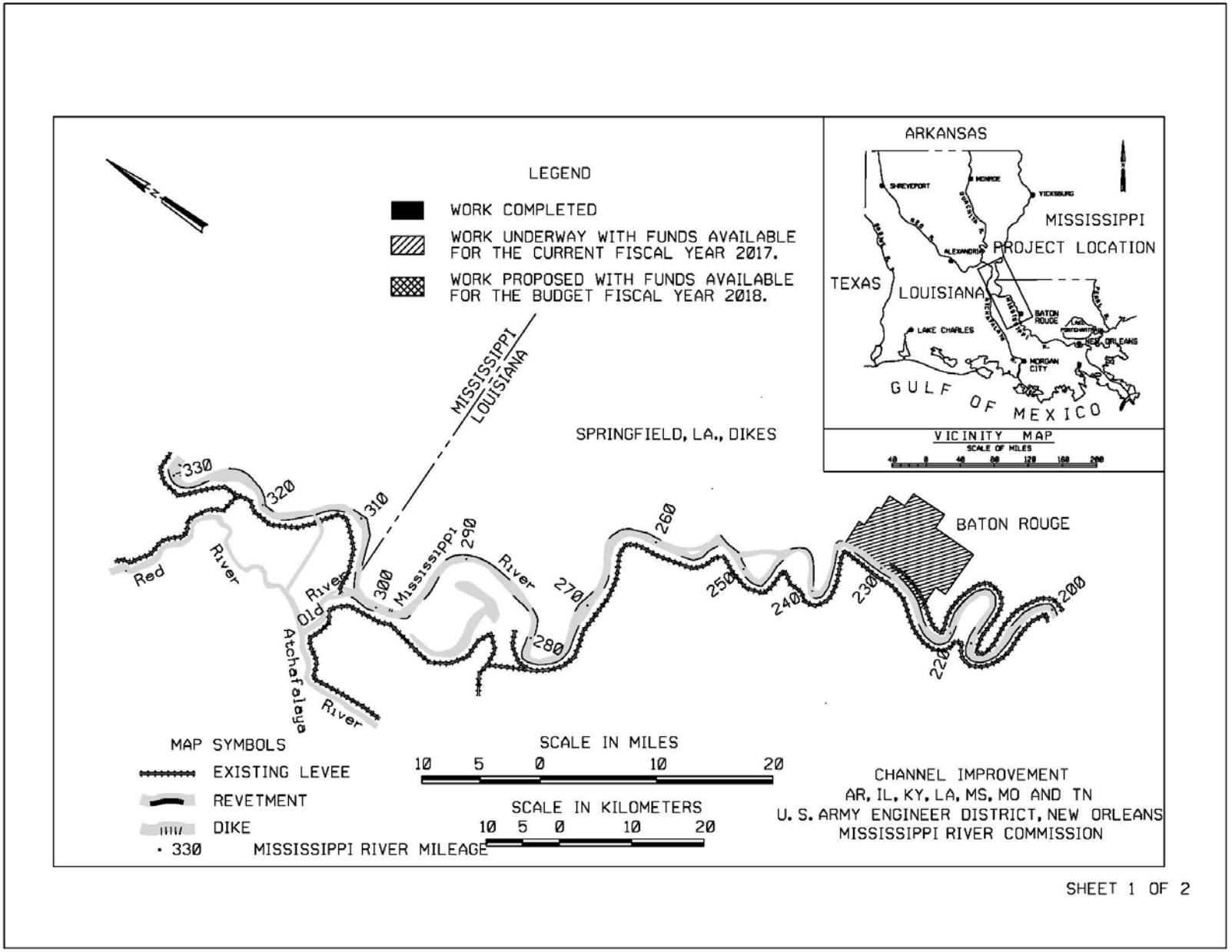

LAKE PONTCHARTRAIN
JEFFERSON HEIGHTS
NEW ORLEANS
DUMAINE STREET FLOODWALL
MATCH SHEET 1 OF 2
CARROLLTON LEVEE ENLARGEMENT PHASE II
107.5-107.3 W
Phoenix
Bohemia
Point Celeste
GULF OF MEXICO
HEAD OF PASSES
SCALES
MILES
0 10 20 30 40
KILOMETERS
0 10 20 30 40 50 60
N
ARKANSAS
TEXAS
LOUISIANA
MISSISSIPPI
PROJECT LOCATION
BATON ROUGE
LAKE CHARLES
VICINITY MAP
LEGEND
WORK COMPLETED, 30 SEPTEMBER 2016
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2017
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2018
MAP SYMBOLS
LOCK
SHORELINE
MISSISSIPPI RIVER LEVEES
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION
SHEET 2 OF 2

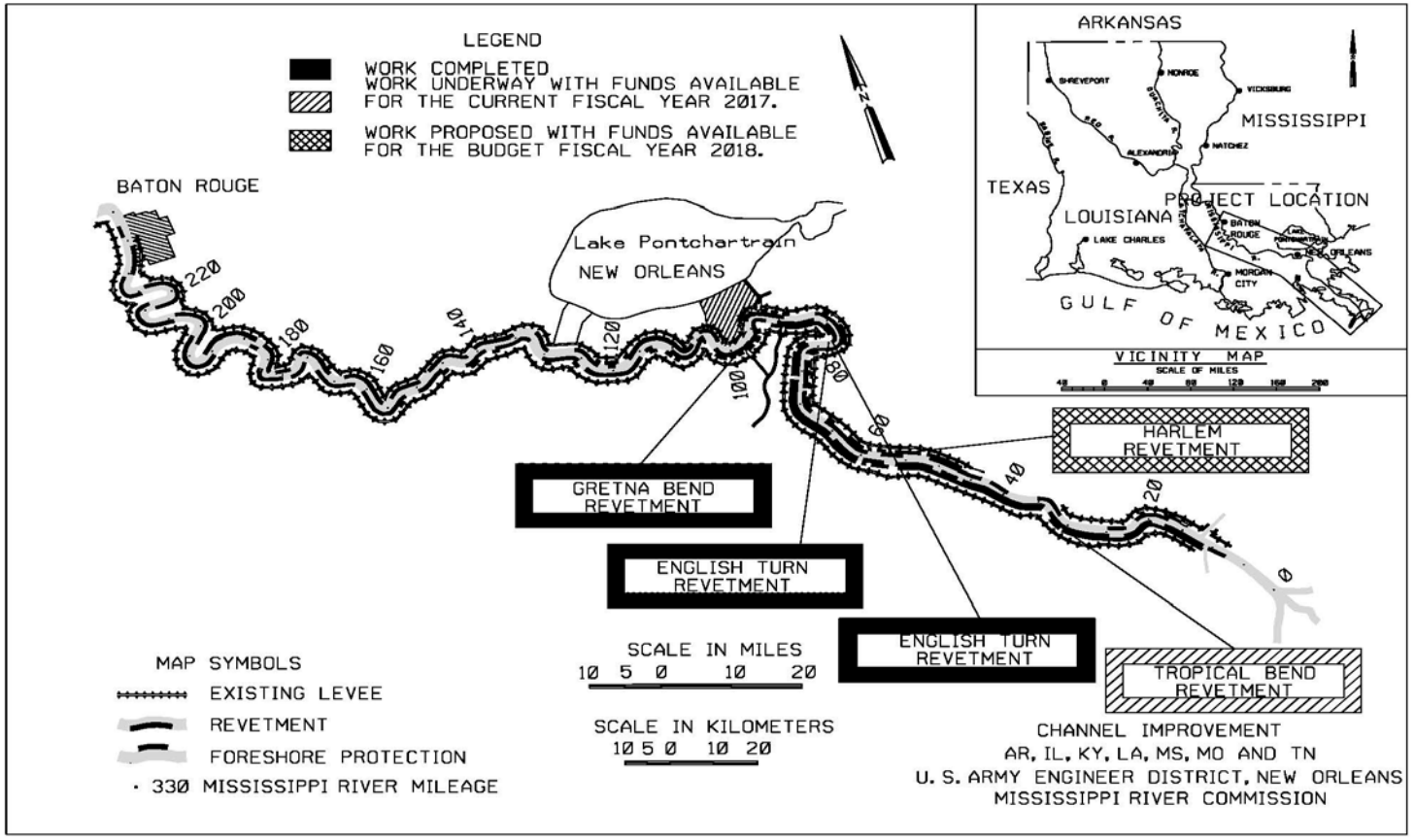

MAP SYMBOLS
Recreation Facility
Revetment
Dikes
Dredging
1962 Mileage, AHP
VICINITY MAP
ILL
MO
KY
ARK
MISS
MEMPHIS
Little Rock
PRESIDENTS ISLAND, TN
REVET (735L)
PRESIDENTS ISLAND, TN (SUPP)
REVET (732L)
PETERS, AR
REVET (692R)
OLDTOWN, AR (SUPP)
REVET (645R)
RESCUE, MS
REVET (625L)
KEYES POINT,TN
DIKE (789L)
WALNUT BEND, AR
(SUPP)
REVET (680R)
HORSESHOE,
AR (SUPP)
REVET (648L)
COW ISLAND, AR (SUPP)
REVET (714R)
ISLAND 67, MS (SUPP)
REVET (627L)
ISLAND 68 –
KNOWLTON, AR
REVET (619R)
LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
SCALE
20 MILES
20 KILOMETERS
CHANNEL IMPROVEMENT
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, MEMPHIS
MISSISSIPPI RIVER COMMISSION
SHEET 2 OF 2


MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
Refuge , Ms (D)
Baleshed Landing, Ms (D)
Greenville
Arkansas City –
Yellow Bend, AR (R)
Anconia Chute, Ar (D)
Wilson Point, Ar (D)
Chicot Landing, Ar (D)
Lake
Providence
ARKANSAS
LOUISIANA
VICINITY MAP
PROJECT
LOCATION
Memphis
Lake Ouachita
Hot
Springs
Lake
Greeson
De Gray
Lake
Camden
Texarkana
Arkabutla Lake
Sardis Lake
Enid Lake
Grenada Lake
Greenville
Sherveport
Monroe
Lake
Providence
Vicksburg
MISSISSIPPI
Natchez
Alexandria
Baton Rouge
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available
For The Current Fiscal Year.
Work Proposed With Funds Requested
For The Budget Fiscal Year.
Work Required To Complete Project
After The Budget Fiscal Year.
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
NOTE:
(R) = Revetment
(D) = Dike
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AK, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 2 OF 4

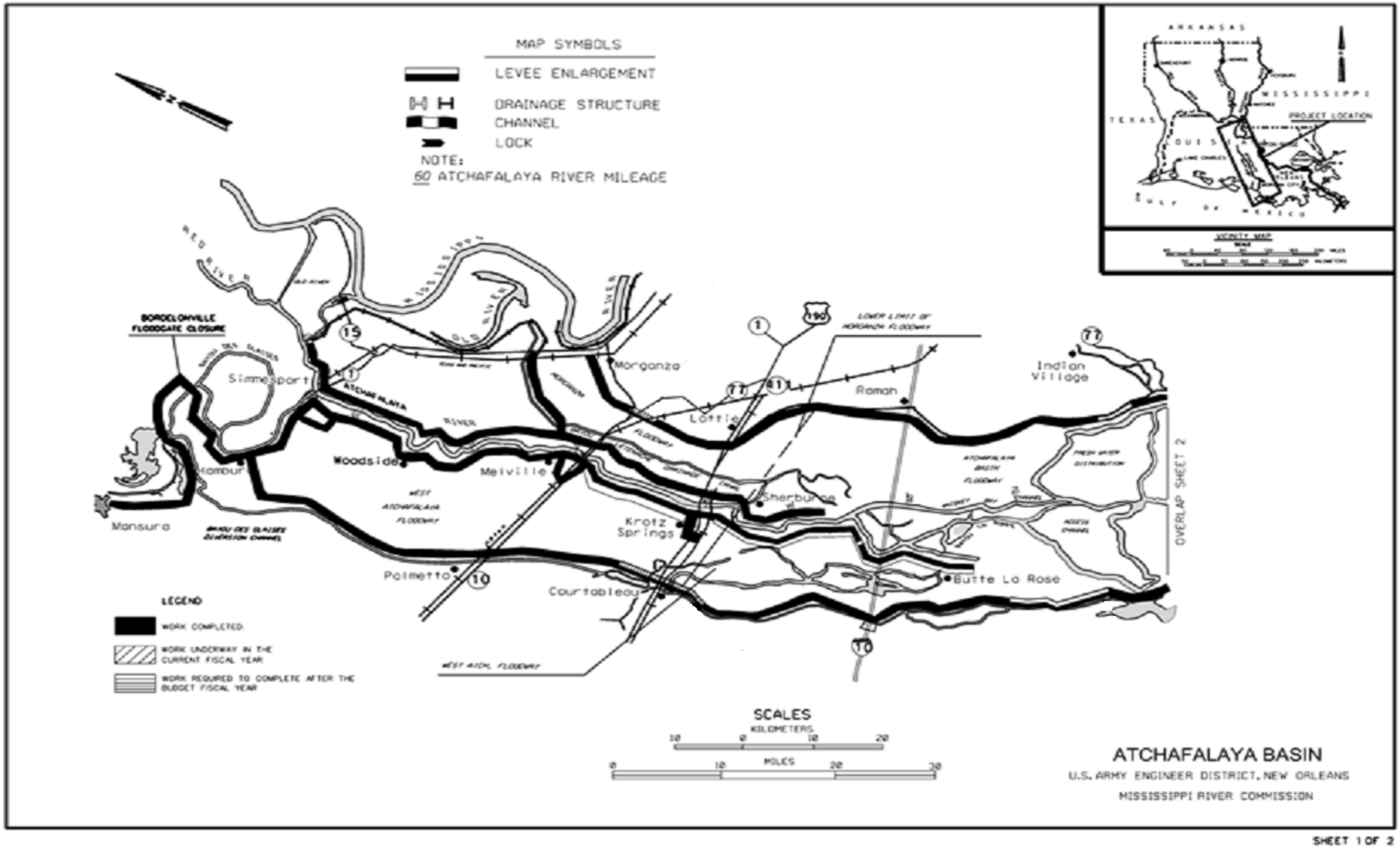

MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
Vicksburg
Belle Island, Ms (R)
Yazoo River
Grand Gulf, Ms (R)
Goldbottom, Ms (R)
Ajax Bar, MS (D)
False Point, LA (D)
Milliken Bend, La (R)
Lake Providence
Willow Cutoff, La (D)
Togo Island, LA (R)
Cottonwood, La (D)
Hardscrabble, La (R)
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
NOTE:
(R) = Revetment
(D) = Dike
VICINITY MAP
PROJECT LOCATION
ARKANSAS
MISSISSIPPI
LOUISIANA
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AR, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 3 OF 4

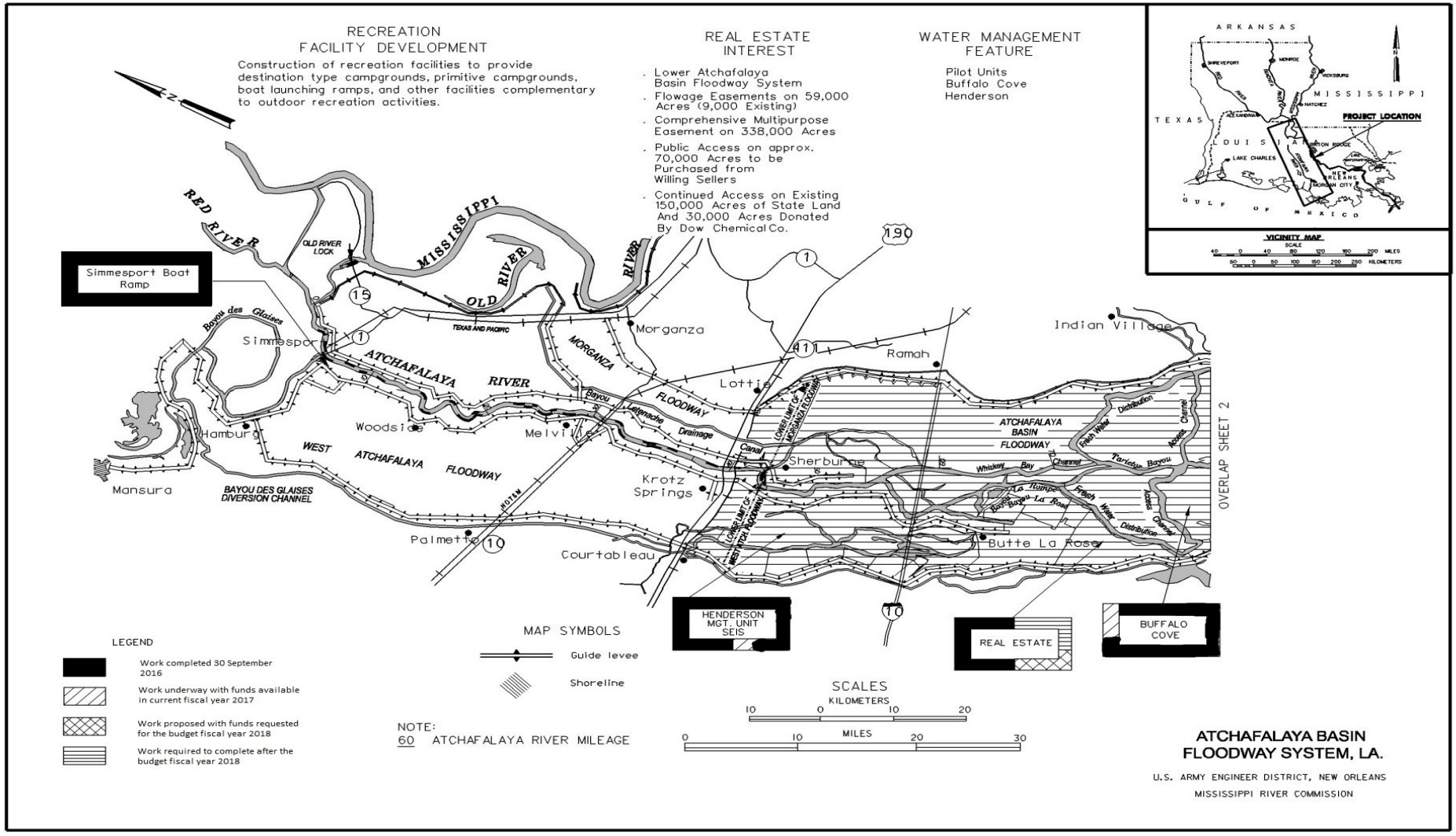

MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
Cottage Bend, MS (D)
Ashland, MS (R)
Natchez
Glasscock, LA (R)
Cottage Bend, MS (D)
LOUISIANA
MISSISSIPPI
Memphis
Lake Ouachita
Hot Springs
Lake Greeson
De Gray Lake
Camden
Texarkana
ARKANSAS
Lake Providence
Sherveport
Monroe
MISSISSIPPI
Vicksburg
LOUISIANA
Natchez
PROJECT LOCATION
Alexandria
Baton Rouge
Arkabutla Lake
Sardis Lake
Enid Lake
Grenada Lake
Greenville
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
NOTE:
(R) = Revetment
(D) = Dike
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 4 OF 4


LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2017.
WORK PROPOSED WITH FUNDS AVAILABLE FOR THE BUDGET FISCAL YEAR 2018.
MISSISSIPPI
LOUISIANA
SPRINGFIELD, LA., DIKES
ARKANSAS
MISSISSIPPI
PROJECT LOCATION
TEXAS
LOUISIANA
SHREVEPORT
MONROE
VICKSBURG
ALEXANDRIA
BATON ROUGE
LAKE CHARLES
NEW ORLEANS
MORGAN CITY
GULF OF MEXICO
VICINITY MAP
SCALE OF MILES
330
320
310
300
290
280
270
260
250
240
230
220
210
200
Red River
Old River
Mississippi River
Atchafalaya River
BATON ROUGE
MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
330 MISSISSIPPI RIVER MILEAGE
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
CHANNEL IMPROVEMENT
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION
SHEET 1 OF 2


LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2017.
WORK PROPOSED WITH FUNDS AVAILABLE FOR THE BUDGET FISCAL YEAR 2018.
BATON ROUGE
Lake Pontchartrain
NEW ORLEANS
220
200
180
160
140
120
100
80
60
40
20
0
GRETNA BEND REVETMENT
ENGLISH TURN REVETMENT
ENGLISH TURN REVETMENT
HARLEM REVETMENT
TROPICAL BEND REVETMENT
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
GULF OF MEXICO
VICINITY MAP
SCALE OF MILES
MAP SYMBOLS
EXISTING LEVEE
REVETMENT
FORESHORE PROTECTION
330 MISSISSIPPI RIVER MILEAGE
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
CHANNEL IMPROVEMENT
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION

SHEET 2 OF 2


MAP SYMBOLS
LEVEE ENLARGEMENT
DRAINAGE STRUCTURE
CHANNEL
LOCK
NOTE:
60 ATCHAFALAYA RIVER MILEAGE
BOREL/ONVILLE FLOODGATE CLOSURE
Simmesport
Morganza
Lottie
Raman
Indian Village
Woodside
Melville
Sherburne
Krotz Springs
Mansura
Palmetto
Courtableau
Butte La Rose
OVERLAP SHEET 2
LEGEND
WORK COMPLETED
WORK UNDERWAY IN THE CURRENT FISCAL YEAR
WORK REQUIRED TO COMPLETE AFTER THE BUDGET FISCAL YEAR
SCALES
KILOMETERS
MILES
ATCHAFALAYA BASIN
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION
ARKANSAS
MISSISSIPPI
TEXAS
PROJECT LOCATION
VICINITY MAP
SHEET 1 OF 2


RECREATION
FACILITY DEVELOPMENT
Construction of recreation facilities to provide destination type campgrounds, primitive campgrounds, boat launching ramps, and other facilities complementary to outdoor recreation activities.
REAL ESTATE
INTEREST
. Lower Atchafalaya Basin Floodway System
. Flowage Easements on 59,000 Acres (9,000 Existing)
. Comprehensive Multipurpose Easement on 338,000 Acres
. Public Access on approx. 70,000 Acres to be Purchased from Willing Sellers
. Continued Access on Existing 150,000 Acres of State Land And 30,000 Acres Donated By Dow Chemical Co.
WATER MANAGEMENT
FEATURE
Pilot Units
Buffalo Cove
Henderson
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
VICINITY MAP
Simmesport Boat Ramp
RED RIVER
MISSISSIPPI RIVER
OLD RIVER
OLD RIVER LOCK
Bayou des Glaises
Simmesport
ATCHAFALAYA RIVER
TEXAS AND PACIFIC
MORGANZA
Morganza
Ramah
Lottie
Indian Village
FLOODWAY
Bayou Latpache Drainage
Hamburg
Woodside
Melville
WEST ATCHAFALAYA FLOODWAY
Mansura
BAYOU DES GLAISES DIVERSION CHANNEL
Palmetto
Courtableau
Krotz Springs
Sherburne
LOWER LIMIT OF MARGINAL FLOODWAY
LOWER LIMIT OF WEST ATCHAFALAYA FLOODWAY
ATCHAFALAYA BASIN FLOODWAY
Fresh Water Distribution
Morse Channel
Whiskey Bay
Tarleton Bayou
La Rompe
Bear Bayou-La Rose
Freeby
Wax Distribution
Butte La Rose
OVERLAP SHEET 2
HENDERSON MGT. UNIT SEIS
REAL ESTATE
BUFFALO COVE
LEGEND
Work completed 30 September 2016
Work underway with funds available in current fiscal year 2017
Work proposed with funds requested for the budget fiscal year 2018
Work required to complete after the budget fiscal year 2018
MAP SYMBOLS
Guide levee
Shoreline
NOTE:
60 ATCHAFALAYA RIVER MILEAGE
SCALES
KILOMETERS
MILES
ATCHAFALAYA BASIN
FLOODWAY SYSTEM, LA.
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION

SHEET 1 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MO, MS, TN Continuing – Remaining Item

PROJECT: Mississippi River Commission (Continuing) 1/

LOCATION: Mississippi Valley Division

DESCRIPTION: The Mississippi River Commission is responsible for Mississippi River and Tributaries policy and work recommendations, studying and reporting upon the need to modify or add to the projects within its jurisdiction. The Commission represents stakeholders in the Mississippi valley, and works with them and the U.S. Army Corps of Engineers on the flood damage reduction challenges posed by the river, and to help identify sustainable engineering solutions. Similar to the Inland Waterways Users Board expenses, this activity is intended to account for all of the expenses necessary to administer the Mississippi River Commission.

AUTHORIZATION: The Mississippi River Commission (MRC) was established by the 1879 Mississippi River Commission Act, Sixth Congress, Session I Ch. 43. 1879.

SUMMARIZED FINANCIAL DATA:

| Allocation in FY 2013 | Allocation in FY 2014 | Allocation in FY 2015 | Allocation in FY 2016 | Allocation in FY 2017 | Budgeted Amount for FY 2018 |
|---|---|---|---|---|---|
| $ | $ | $ | $ | $ | $ |
| N/A | N/A | N/A | N/A | N/A | 90,000 |

JUSTIFICATION: The purpose of this line item is to provide transparency on the expenses incurred by the Mississippi River Commission and to keep track of those costs over time.

FISCAL YEAR 2018: The budget amount of $90,000 will be applied as follows:

| | |
|---|---|
| Civilian Members Stipends and associated travel | $90,000 |
| Total | $90,000 |

PROPOSED ACTIVITIES FOR FISCAL YEAR 2018: The Fiscal Year 2018 funds will be used as follows: to meet expenses for three Civilian Members and associated travel, $21,500 annually when a civilian member is duly appointed. The remaining four Commission Members are military officers who receive no extra compensation for service on the Commission.

1/ There are no non-Federal Costs.

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Operation and Maintenance

**PROJECT NAME:** Lower Mississippi River Main Stem (LMRMS) - Commercial Navigation

**AUTHORIZATION:** The LMRMS Operation and Maintenance (O&M) project is comprised of three navigation features: Atchafalaya Basin, Old River, and Channel Improvement.

- Atchafalaya Basin authorization: Flood Control of the Mississippi River Act of 1928 (P.L. 70-391) and as amended by the Flood Control Act of 1954 (Title II of P.L. 83-780)
- Old River authorization: Flood Control Act of 1954 (Title II of P.L. 83-780), to provide for control of flows from the Mississippi River to the Atchafalaya River and Basin by mechanically operated control structures on the right bank of the Mississippi River.
- Channel Improvement authorization: Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), the Flood Control Acts of 1936 (P.L. 74-738), 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 77-534), 1962 (Title II of P.L. 87-874), 1966 (Title II of P.L. 89-789), and 1970 (Title II of P.L. 91-611)

**LOCATION AND DESCRIPTION:** The LMRMS project stretches from the vicinity of Cairo, Illinois to the Gulf of Mexico. The project consists of engineering structures, revetments, dikes, levees, foreshore protection, and dredging to obtain and maintain efficient flow for flood risk management and navigation.

**FISCAL YEAR 2016 ALLOCATIO**N: $32,687,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used for routine and non-routine O&M of the revetments, dikes, and dredging program. Non-routine O&M included replacing crane cable at Old River lock.

**FISCAL YEAR 2017 ALLOCATION:** $35,624,300 /2

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds are being used as follows: Channel Improvement (Dikes) - Perform dike maintenance of the Mississippi River ($2,515,000); Channel Improvement (Dredging) - Perform dredging of the Mississippi River ($17,127,000); Atchafalaya Basin - Operate and maintain navigation features, conduct inspections; dredge Tidewater point, Berwick Bay Harbor, Berwick Lock and Three Rivers; Perform levee slide repairs. Timber guide wall and chamber wall repairs Bayou Sorrel and Bayou Bouef Lock ($10,443,000); Old River LA - Perform reconnaissance surveys, real estate management, operation of project, refurbish and replace structural components and other maintenance; dredge forebay and tailbay channel; operate recreation functions and natural resource management; Management of wildlife and critical habitat on fee-owned lands; Provide recreation services at the Old River Lock campground ($5,539,300).

**BUDGETED AMOUNT FOR FY 2018:** M**:** $14,437,000 O**:** $17,790,000 T**:** $32,167,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** $32,167,000 - Funding provides for routine O&M for commercial navigation work on the LMRMS project.

**FRM:** N/A

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** The five-year average commercial tonnage is 168,712,000. Channel improvements provide a 9-foot deep by 300-foot wide navigation channel from Cairo, IL to the Gulf of Mexico.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $1,633,000, including $1,392,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR. IL, KY, LA, MS, MO, and TN– Operation and Maintenance

**PROJECT NAME:** Lower Mississippi River Main Stem (LMRMS) – Flood Damage Reduction

**AUTHORIZATION:** The LMRMS Operation and Maintenance (O&M) project is comprised of six flood damage reduction features: the Atchafalaya Basin, Atchafalaya Basin Floodway System, Bonnet Carre, Channel Improvement, Mississippi River Levees and Old River.

- Atchafalaya Basin authorization: Flood Control of the Mississippi River Act of 1928 (P.L. 70-391) and as amended by the Flood Control Act of 1954 (Title II of P.L. 83-780)
- Atchafalaya Basin Floodway System authorization: Supplemental Appropriations Act of 1985 (P.L. 99-88), Water Resources Development Act, of 1986 (P.L. 99-662), Energy and Water Development Appropriations Act of 1988 (P.L. 100-202), Energy and Water Development Appropriations Act of 1991 (P.L. 101-514), Energy and Water Development Appropriations Act of 1997 (P.L. 104-206), and Water Resources Development Act of 2000 (P.L. 106-541), and Water Resources Development Act of 2007 (P.L. 110-114)
- Bonnet Carre and Old River authorization: Flood Control Act of 1954 (Title II of P.L. 83-780), to provide for control of flows from the Mississippi River to the Atchafalaya River and Basin by mechanically operated control structures on the right bank of the Mississippi River.
- Channel Improvement authorization: Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), the Flood Control Acts of 1936 (P.L. 74-738), 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 77-534), 1962 (Title II of P.L. 87-874), 1966 (Title II of P.L. 89-789), and 1970 (Title II of P.L. 91-611)
- Mississippi River Levees authorization: Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), Flood Control Act of 1936 (P.L. 74-738), Flood Control Acts of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1946 (P.L. 79-526), 1950 (Title II of P.L. 81-516), 1954 (Title II of P.L. 83-780), 1962 (Title II of P.L. 87-874), and 1965 (Title II of P.L. 89-298), 1968 (Title II of P.L. 90-483), River Basin Monetary Authorization Act of 1971 (P.L. 92-222), the Water Resources Development Act of 1992 (P.L. 102-580), 2000 (P.L. 106-541), and 2014 (P.L. 113-121)

**LOCATION AND DESCRIPTION:** The LMRMS project stretches from the vicinity of Allenville, Missouri to the Gulf of Mexico. The project consists of flood control structures, levees, revetments, foreshore protection, and dredging.

**FISCAL YEAR 2016 ALLOCATION:** $129,700,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine and non-routine O&M of the revetments and levees. Non-routine O&M includes floodwall repairs at Cairo, IL, Helena, AR and Hickman, KY; levee slide repairs; sandblasting and painting 10 to 20 gate bays and re-wiring gantry crane at Old River low sill structure.

**FISCAL YEAR 2017 ALLOCATION:** $84,628,400

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used as follows: Channel Improvement (Revetments) - perform bank stabilization maintenance activities associated with Mississippi River channel revetment ($58,424,000); Mississippi River Levees - conduct levee maintenance including slide repairs, relief wells, water control data systems; Operation and maintenance of the Jesse Brent Lower Mississippi River Museum; Maintenance of mitigation lands ($12,404,400); Atchafalaya Basin Floodway System - operate and maintain 28,500 acres of fee-owned property for visitor assistance; including funding for janitorial and mowing maintenance contracts; water safety patrols; inspect levees and easements; operate recreation features; and protect natural resources; operate and maintain 28,500 acres of fee-owned property for visitor assistance ($1,912,000); Atchafalaya Basin - operate and maintain flood control structures, conduct inspections; Perform levee slide repairs ($2,455,000); Bonnet Carre, LA - Operate and maintain project; Manage and maintain natural resources including bottomland hard and swamp reforestation; Create new parking areas and re-open North Main Road; Construction of Ranger

Office with Energy efficiency improvements ($4,181,000); Old River LA - Perform reconnaissance surveys, real estate management, instrumentation and data gathering; dredge forebay and tailbay channel; operate recreation functions and natural resource management; Replace crane cable; Management of wildlife and critical habitat on fee-owned lands ($5,252,000).

**BUDGETED AMOUNT FOR FY 2018:** M**:** $50,571,000 O**:** $9,863,000 T**:** $60,434,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $57,952,000 – Funding provides for routine O&M of the LMRMS flood damage reduction project.

**RC:** $1,400,000 – Funding provides for routine O&M recreation activities.

**H:** N/A

**EN:** $1,082,000 – Funding provides for management of environmental stewardship and natural resources.

**WS:** N/A

**OTHER INFORMATION:** None.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $19,822,000, including $18,917,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Operation and Maintenance

**PROJECT NAME:** Mapping, AR, IL, KY, LA, MS, MO, and TN

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391) and the 1937 Flood Control Act of 1936 amendments (P.L. 75-406) provide for the preparation of topographic maps of the alluvial valley in the furtherance of the control of floods on the Mississippi River and Tributaries.

**LOCATION AND DESCRIPTION:** This Federal project provides for up-to-date maps for flood and floodplain management on the Mississippi River and tributaries.

**FISCAL YEAR 2016 ALLOCATION:** $1,138,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform mapping activities including collection of funds for the sales of maps, publications, historical photos, aerial photography and other materials on rivers and harbor, and flood control infrastructure on the Mississippi River and Tributaries.

**FISCAL YEAR 2017 ALLOCATION:** $1,127,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to perform mapping activities including collection of funds for the sales of maps, publications, historical photos, aerial photography and other materials on rivers and harbor, and flood control infrastructure on the Mississippi River and Tributaries.

**BUDGETED AMOUNT FOR FY 2018:** M: $719,000 O: $420,000 T: $1,139,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $1,139,000 – Funds will be used to perform mapping activities including collection of funds for the sales of maps, publications, historical photos, aerial photography and other materials on rivers and harbor, and flood control infrastructure on the Mississippi River and Tributaries.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS**: N/A

**OTHER INFORMATION:** The existing 1-to-62,500 quadrangle maps are currently being converted from the original hard copy format to a computer-aided design format. The digital format will allow the maps to be used in the computer-aided design environment for a multitude of uses including geographic information systems.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $21,000, including $14,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date the justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on the effort is $0.*

**APPROPRIATION TITLE**: Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Inspection of Completed Works, AR, IL, KY, LA, MS, MO, and TN

**AUTHORIZATION:** The Rivers and Harbors Act of 1899 (30 Stat. 1151) and the Flood Control Act of the Mississippi River Act of 1928 (P.L. 70-391)

**LOCATION AND DESCRIPTION:** The Inspection of Completed Works (ICW) includes inspection and monitoring of the projects funded in the MR&T account to ensure their capability to perform as designed and constructed. The MR&T projects consist of approximately 3,486 miles of levees and floodwalls (including tributary levees), flood control structures, flood control structures, floodways, drainage structures, pumping stations, flood control channels, reservoirs, dikes, and revetments.

**FISCAL YEAR 2016 ALLOCATION:** $2,805,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used for routine inspections, flood control permitting, levee certification, and analysis.

**FISCAL YEAR 2017 ALLOCATION:** $3,117,000

**DESCRIPTION OF WORK FOR FY 2017:** FY 2017 funds will be used for routine inspections, flood control permitting, levee certification, and analysis.

**BUDGETED AMOUNT FOR FY 2018:** M: $0 O: $1,571,000 T: $1,571,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A.

**FRM:** $1,571,000 FY 2018 will be used for inspections and monitoring of the Mississippi River and Tributaries flood control system, including 463 miles of levees, 516 miles of channels, 125 drainage structures, 1 pumping plant and 15 weirs. Also provides for flood control permitting and levee evaluation.

**RC:** N/A.

**H:** N/A.

**EN:** N/A.

**WS:** N/A.

**OTHER INFORMATION:** Most of the flood control features referenced above are federally constructed, but are operated and maintained by state levee districts or local governmental agencies. The Inspection of Completed Works program includes responsibility for inspecting all of the flood control features to ensure appropriate maintenance is being performed.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $90,000. As of the date the justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on the effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Operation and Maintenance

**PROJECT NAME:** Helena Harbor, Phillips County, AR

**AUTHORIZATION:** The Water Resources Development Act of 1986 (P.L. 99-662).

**LOCATION AND DESCRIPTION:** The shallow draft-moderate-use, Federal harbor is located in Phillips County, five miles south of Helena, AR at river-mile 652 on the lower Mississippi River. The harbor is used by farming and other regional industries for shipping. The existing channel is 9-feet deep, 300-feet wide, and 2.25-miles long, with an additional 50 feet of width for berthing; a fleet area, 100 feet by 1,000 feet; and a turning basin, 600-feet wide and 600-feet long.

**FISCAL YEAR 2016 ALLOCATION:** $765,000

**DESCRIPTIONS OF WORK FOR FY 2016:** $15,000 was used to collect hydrographic survey data in the harbor and turning basin. This information was provided to local sponsors for use in determining the channel condition and navigation hazards. An additional $750,000 was used for dredging the harbor.

**FISCAL YEAR 2017 ALLOCATION:** $715,000

**DESCRIPTIONS OF WORK FOR FY 2017:** Funds will be used to dredge the harbor and conduct limited navigation channel surveys.

**BUDGETED AMOUNT FOR FY 2018:** M: $900,000 O: $15,000 T: $915,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** $915,000 – Funding provides for routine operation and maintenance (O&M) for authorized channel dimensions.

**FRM:** N/A

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** None.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Lower Arkansas River, North Bank, AR

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), The Flood Control Act of 1936 (P.L. 74-738), 1946 (P.L. 79-526), and 1965 (Title II of P.L. 89-298)

**LOCATION AND DESCRIPTION:** This flood control project is located in southeast Arkansas. The lower Arkansas River levees prevent overflow of the alluvial valleys of the Arkansas River below the Pine Bluff, Arkansas. The north bank levee in conjunction with the west bank Mississippi River levee protects the Tensas Basin against flooding.

**FISCAL YEAR 2016 ALLOCATION:** $294,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were to perform routine operations and maintenance of the project including levee slide repairs.

**FISCAL YEAR 2017 ALLOCATION:** $294,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to perform routine operation and maintenance (O&M) of the project, including levee slide repairs and gravel surfacing**.**

**BUDGETED AMOUNT FOR FY 2018:** M: $235,000 O: $0 T: $235,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $235,000 – Funding provides for the maintenance of the project including levee slide repairs.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** None.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Lower Arkansas River, South Bank, AR

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), the Flood Control Act of 1936 (P.L. 74-738), 1946 (P.L. 79-526), and 1965 (Title II of P.L. 89-298)

**LOCATION AND DESCRIPTION:** The flood control project is located in southeast Arkansas. The lower Arkansas River levees prevent overflow of the alluvial valleys of the Arkansas River below the Pine Bluff, Arkansas. The north bank levee in conjunction with the west bank Mississippi River levee protects the Tensas Basin against flooding.

**FISCAL YEAR 2016 ALLOCATION:** $198,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used for routine operation and maintenance (O&M) of the project, including levee slide repairs, quality analysis and data collection

**FISCAL YEAR 2017 ALLOCATION:** $198,000

**DESCRIPTIONS OF WORK FOR FY 2017: FY 2017 funds were** used for routine operation and maintenance (O&M) of the project, including levee slide repairs and gravel surfacing.

**BUDGETED AMOUNT FOR FY 2018:** M: $158,000 O: $0 T: $158,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2017:**

**N:** N/A.

**FRM:** $158,000 – FY 2018 funds will be used to perform routine operation and maintenance (O&M) of the project.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** None.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $600. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** St. Francis Basin, AR and MO

**AUTHORIZATION:** Flood Control on the Mississippi River of 1928 (P.L. 70-391), as amended by the Acts in1936 (P.L. 74-678), Flood Control Act of 1941 (P.L. 77-228), 1946 (P.L. 79-526), 1950 (Title II of P.L. 81-516), 1965 (Title II of P.L. 89-298) and 1968 (Title II of 90-483). Local cooperation requirements were modified by the Flood Control Act of 1946 (P.L. 79-526), and limited local responsibility to ordinary maintenance as defined by Section 3 of the Flood Control Act of 1928 (P.L. 70-391).

**LOCATION AND DESCRIPTION:** The St. Francis Basin Project provides flood risk reduction to a certain level of flood protection for Federal maintenance of authorized facilities, structures, levees, channels and pump stations. The project extends from southwest of Cape Girardeau, MO to the confluence of the St. Francis and Mississippi Rivers, ten miles north of Helena, AR. The St. Francis Basin project consists of 400 miles of levees and 800 miles of ditches.

**FISCAL YEAR 2016 ALLOCATION:** $11,150,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used for routine operation and maintenance of the Huxtable pumping plant and the Drainage District 17 pumping plant, and to perform aerial brush kill, channel and environmental survey, channel cleanouts and to design repairs to the St Francis Lake Control Structure-Scour Closure Repair (Dam 10), AR. An additional $4,000,000 provided for construction of a large rock grade control structure to stop extensive active scour which created a new channel that bypasses authorized ditches and structures, including the St. Francis Lake Control Structure and Dam 10. The St Francis Lake Control Structure-Scour Closure Repair (Dam 10) is necessary to maintain the channel and ensure the functionality and operability of the St. Francis Lake Control Structure and Dam 10. An additional $1,250,000 provided for the 2016 winter flood fight and response.

**FISCAL YEAR 2017 ALLOCATION:** $7,050,000

**DESCRIPTION OF WORK FOR FY 2017:** FY 2017 funds will be used for routine operation and maintenance of the Huxtable pumping plant and the Drainage District 17 pumping plant, for the supervision and administration of previously awarded contracts, and to perform routine aerial brush kill, channel and environmental surveys, and channel maintenance. Additional funds will be for pumping plant exhaust system renovation and engineering & design, and construction for a ditch cleanout to restore it to the original authorized section.

**BUDGETED AMOUNT FOR FY 2018:** M: $1,032,000 O: $4,868,000 T: $5,900,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $5,900,000 – Funding provides routine operation and maintenance of the Huxtable pumping plant and the Drainage District 17 pumping plant, for the supervision and administration of previously awarded contracts, and to perform routine aerial brush kill, channel and environmental surveys, and channel maintenance.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** The O&M of this project ensures the project provides flood risk reduction to an area of 14,000,000 acres of agricultural lands and numerous small towns, several major railroads, highways, and utilities.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY2016 into FY2017 for this project is $340,000, including $54,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE**: Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Tensas Basin, Boeuf-Tensas River, AR and LA

**AUTHORIZATION:** Flood Control Acts of 1944 (P.L. 78-534), 1946 (P.L. 79-526), 1950 (Title II of P.L. 81-516), 1958 (Title II of P.L. 85-500), 1962 (Title II of P.L. 86-645), 1965 (Title II of P.L. 89-298), 1968 (Title II of P.L. 90-483), and the Water Resources Development Act of 1986 (P.L. 99-662)

**LOCATION AND DESCRIPTION**: The flood control project is located in central and northeast Louisiana and southeast Arkansas, including the Lake Chicot pumping plant.

**FISCAL YEAR 2016 ALLOCATION:** $3,113,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine operations and maintenance (O&M), including inspections, water control, data collection, analysis, real estate management, and outlet works lighting.

**FISCAL YEAR 2017 ALLOCATION:** $2,879,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to perform routine operations and maintenance (O&M), including inspections, data collection, analysis, and real estate management. Additional funds will be used on maintenance of dams, reservoirs, levees, floodwalls, hurricane barriers, and other structures.

**BUDGETED AMOUNT FOR FY 2018:** M: $61,000 O: $1,926,000 T: $1,987,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $1,987,000 – FY 2018 funds will be used to perform routine operation and maintenance (O&M) of the project including inspections

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** This project allows drainage for 5,300-square miles in southeast Arkansas and northeast Louisiana.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $2,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** White River Backwater, AR

**AUTHORIZATION:** Flood Control on the Mississippi River Act of 1928 (P.L. 70-391), as amended. Local cooperation requirements, as modified by the Flood Control Act of 1951, were limited to ordinary maintenance as defined by Section 3 of the Flood Control on the Mississippi River Act of 1928.

**LOCATION AND DESCRIPTION:** The project is located 20 miles south of Helena, near Elaine, AR in Phillips and Desha Counties. It consists of 40.2 miles of levees, a pumping station, outlet structures, and culverts. The White River Backwater levee, together with the Mississippi River Levee between Old Town and Laconia Circle, protects the enclosed area against all but extreme floods. The combined levee system reduces extreme crests on the White River by admitting drainage into the enclosed area and restoring the White River Backwater Pool.

**FISCAL YEAR 2016 ALLOCATION:** $1,300,000

**DESCRIPTIONS OF WORK FOR FY 2016:** $1,000,000 was used to provide routine operation and maintenance activities at the White River Backwater levee system and at the Graham Burke Pumping Station. An additional amount of $300,000 was used to reimburse the project for the cost of the flood fight activities during December 2015 and January 2016.

**FISCAL YEAR 2017 ALLOCATION:** $1,000,000

**DESCRIPTIONS OF WORK FOR FY 2017:** Funds will be used to perform routine operation and maintenance activities on the White River Backwater levee system and at the Graham Burke Pumping Station.

**BUDGETED AMOUNT FOR FY 2018:** M: $200,000 O: $700,000 T: $900,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $900,000 – Funds will provide routine operation and maintenance at the Graham Burke Pumping Station.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** None.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $1,000, which was committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY2018 from prior appropriations for use on the effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Operation and Maintenance

**PROJECT NAME:** Bayou Cocodrie and Tributaries, LA

**AUTHORIZATION:** The Flood Control Act of 1941 (P.L. 77-228) and the Water Resources Development Act of 1974 (P.L. 93-251)

**LOCATION AND DESCRIPTION:** The project is west of Natchez, MS in central Louisiana in Rapides, Avoyelles, Evangeline and St. Landry Parishes. The project provides flood relief from the Bayou Cocodrie tributaries south to lower Bayou Courtableau.

**FISCAL YEAR 2016 ALLOCATION:** $48,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used for routine operation and maintenance (O&M) for flood risk management activities.

**FISCAL YEAR 2017 ALLOCATION:** $48,000

**DESCRIPTIONS OF WORK FOR FY 2017:** Funds were used for routine operation and maintenance (O&M) for flood risk management activities.

**BUDGETED AMOUNT FOR FY 2018:** M: $0 O: $36,000 T: $36,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $36,000 – Funding will be used for routine O&M for flood risk management.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** This project maintains stream monitoring gauges for flood control and to track flow stages.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Lower Red River, South Bank Levees, LA

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391)

**LOCATION AND DESCRIPTION:** The levee system extends from river-mile 67 on the Red River at Moncla, LA in Avoyelles Parish to river-mile 126 at Hot Wells, LA in Rapides Parish.

**FISCAL YEAR 2016 ALLOCATION:** $498,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine operations and maintenance (O&M) of the project including levee slide repairs.

**FISCAL YEAR 2017 ALLOCATION:** $498,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to perform routine operation and maintenance (O&M) of the project, including levee slide repairs and gravel surfacing.

**BUDGETED AMOUNT FOR FY 2018:** M: $0 O: $398,000 T: $398,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N**: N/A

**FRM:** $398,000 – FY 2018 funds will be used to perform routine O&M for flood risk management.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** This project provides protection to 1739-square miles of urban, agricultural, and wooded lands from flooding from the headwaters of the Red and Black and backwaters of the Mississippi River.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $3,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Operation and Maintenance

**PROJECT NAME:** Mississippi Delta Region, LA

**AUTHORIZATION:** The Flood Control Act of 1965 (Title II of P.L. 89-298) and the Water Resources Development Acts of 1974 (P.L. 93-251), 1986 (P.L. 99-1013), and 1996 (P.L. 104-303)

**LOCATION AND DESCRIPTION:** The Mississippi Delta Region (MDR) Project is located in the lower Mississippi River delta region in Plaquemines and St. Charles Parishes, LA. The project includes the Caernarvon and Davis Pond Freshwater Diversions. The Caernarvon structure is located in Plaquemines Parish on the east bank of the Mississippi River in the vicinity of Caernarvon. The Davis Pond structure is located in St. Charles Parish on the west bank just downstream of Luling. These structures divert freshwater, nutrients, and some sediment from the Mississippi River to bays and marshes of Breton Sound and Barataria Basins for fish and wildlife enhancement. The project restores ecological conditions by controlling salinity.

**FISCAL YEAR 2016 ALLOCATION:** $567,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine operation and maintenance for Caernarvon Freshwater Diversion Structure and the Davis Pond Freshwater Diversion Structure.

**FISCAL YEAR 2017 ALLOCATION:** $2,171,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds were used for routine operation and maintenance for Caernarvon Freshwater Diversion Structure and the Davis Pond Freshwater Diversion Structure.

**BUDGETED AMOUNT FOR FY 2018:** M: $ 0 O: $381,000 T: $381,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $381,000 - Funds will be used for routine O&M for flood risk management.

**RC:** N/A

**H**: N/A

**EN**: N/A

**WS**: N/A

**OTHER INFORMATION:** The Caernarvon structure is operated by Plaquemines Parish and the Davis Pond structure is operated by St. Charles Parish, both under contract with the local sponsor, the Louisiana Office of Coastal Protection and Restoration. Funding for project routine O&M is cost-shared at 75-percent Federal and 25-percent by the State. Beyond the ecological and economic benefits that the MDR Project provides, the project diversions restore connectivity between the Mississippi River and its estuaries, for increased coastal sustainability.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $7,000, including $2,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Tensas Basin, Red River Backwater Area, LA

**AUTHORIZATION:** Flood Control Acts of 1941 (P.L. 77-228), 1944 (P.L. 78-534), 1946 (P.L 79-526), 1950 (Title II of P.L. 81-516), 1958 (Title II of P.L. 85-500), 1962 (Title II of P.L. 87-874), 1965 (Title II of P.L. 89-298), 1968 (Title II of P.L. 90-483), and the Water Resources Development Act of 1986 (P.L. 99-662)

**LOCATION AND DESCRIPTION:** The flood control project is located in central and northeast Louisiana. The maintained lower-basin features include levees, drainage structures, and the Tensas-Cocodrie pumping plant.

**FISCAL YEAR 2016 ALLOCATION:** $4,047,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine operation and maintenance (O&M) of the project, including levee slide repairs, real estate management, water control quality, data collection and analysis and contracting support.

**FISCAL YEAR 2017 ALLOCATION:** $3,345,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to continue operation and maintenance (O&M) at a reduced level of service.

**BUDGETED AMOUNT FOR FY 2018:** M: $30,000 O: $2,578,000 T: $2,608,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $2,608,000 – FY 2018 funds will be used to perform routine operation and maintenance (O&M) of the project including bridge inspections, data collection and analysis.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION**: None

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $3,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Operation and Maintenance

**PROJECT NAME:** Baton Rouge Harbor, Devils Swamp, LA

**AUTHORIZATION:** The River and Harbor Act of 1946 (79-525) then transferred to flood control purposes under the Flood Control Act of 1948 (Title II of P.L. 80-858)

**LOCATION AND DESCRIPTION:** The project is a moderate-use, shallow-draft Federal harbor project in the northern portion of East Baton Rouge Parish on the left descending bank of the Mississippi River. The authorized barge channel is 2.5-miles long, 12-feet deep and 300-feet wide. The Federal project provides a slack water channel for barge traffic and an industrial expansion area for the port of Baton Rouge, LA.

**FISCAL YEAR 2015 ACTUAL:** $237,188

**FISCAL YEAR 2016 ALLOCATION:** $53,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to provide engineering, design, and surveys for dredging.

**FISCAL YEAR 2017 ALLOCATION:** $255,000

**DESCRIPTIONS OF WORK FOR FY 2017:** Funds will be used for annual maintenance dredging at the intersection of the Mississippi River and the entrance of the Harbor channel to provide a channel for barge traffic.

**BUDGETED AMOUNT FOR FY 2018:** M: $543,000 O: $0 T: $543,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2018:**

**N:** $543,000 - Funds with be used for surveys to determine channel conditions

**FRM:** N/A

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** The purpose of the channel is to provide an industrial expansion area for the Port of Baton Rouge.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $671,000, including $630,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Greenville Harbor, MS

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), as amended by the Flood Control Act of 1946 (P.L. 79-526) and 1954 (Title II of P.L. 83-780), and the Water Resources Development Act of 1986 (P.L. 99-1013)

**LOCATION AND DESCRIPTION:** The Greenville Harbor is a moderate-use, shallow-draft Federal harbor in Greenville, MS. It provides access to the Mississippi River via a 250-foot wide by 9-foot deep channel. The harbor is located in an old bendway of the Mississippi River on Lake Ferguson, southwest of the City of Greenville. The harbor and turning basin are 500-feet wide and 10,000-feet long, with a depth of nine feet at the lowest river stages. The project's purpose is to provide local navigable access to these harbor facilities. This is a moderate use shallow draft harbor.

**FISCAL YEAR 2016 ALLOCATION:** $1,274,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 were used to perform surveys.

**FISCAL YEAR 2017 ALLOCATION:** $600,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to perform surveys and annual dredging as necessary to keep the Port open to the Mississippi River.

**BUDGETED AMOUNT FOR FY 2018:** M: $996,000 O: $4,000 T: $1,000,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** $1,000,000 – FY 2018 funds will be used to conduct routine surveys and perform annual maintenance dredging.

**FRM:** N/A

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** None.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $0. As of the date this this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Vicksburg Harbor, MS

**AUTHORIZATION:** The Flood Control on the Mississippi Act of 1928 (P.L. 70-391), as amended by the Flood Control Acts of 1946 (P.L. 79-526) and 1954 (Title II of P.L. 83-780), and the Water Resources Development Act of 1986 (P.L. 99-662)

**LOCATION AND DESCRIPTION:** The Vicksburg Harbor is located in west-central Mississippi at Vicksburg, MS with access to the Mississippi River via the Yazoo River Diversion Canal. The harbor channel is 500-feet wide and 12,000-feet long, with a 500-foot wide and 15,000-foot long channel on the Yazoo River Diversion Canal from the Mississippi River to the harbor entrance. A minimum depth of nine feet is maintained at the lowest Mississippi River stage. The project's authorized purpose is navigation. This is a moderate use shallow draft harbor.

**FISCAL YEAR 2016 ALLOCATION:** $792,000

**DESCRIPTIONS OF WORK FOR FY 2016**: FY 2016 were used to conduct surveys.

**FISCAL YEAR 2017 ALLOCATION:** $192,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to provide annual dredging and to conduct channel surveys.

**BUDGETED AMOUNT FOR FY 2018:** M: $743,000 O: $7,000 T: $750,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** $750,000 – Funding provides for routine surveys and perform annual maintenance dredging.

**FRM:** N/A

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** None.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $750,000. As of the date this this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Arkabutla Lake, MS

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), The Flood Control Act of 1936 (P.L. 74-738), the 1937 Flood Control Act of 1936 amendments (P.L. 75-406), the Flood Control Acts of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 77-534), and 1946 (P.L. 79-526)

**LOCATION AND DESCRIPTION:** Arkabutla Lake is in Tate and DeSoto Counties in north Mississippi, four miles north of Arkabutla and 30 miles south of Memphis, TN. Arkabutla Lake is on the Coldwater River and stores floodwaters for the Yazoo Basin.

**FISCAL YEAR 2016 ALLOCATION:** $6,078,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform operation and maintenance (O&M) of the project, including inspections, forest management, real estate encroachments, cultural resources, and wildlife and habitat management.

**FISCAL YEAR 2017 ALLOCATION:** $6,330,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will used to operate and maintain the project, including inspections and data collection and analysis of flood control structures, outlet works, LED lighting installation, recreation facilities; management of wildlife and natural resources; and cultural resources site monitoring and protection; and outlet work conduit repairs.

**BUDGETED AMOUNT FOR FY 2018:** M: $34,000 O: $5,576,000 T: $5,610,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $3,056,000 –FY 2018 funds will be used to perform routine operation and maintenance (O&M) for flood risk management.

**RC:** $1,921,000 – FY 2018 funds will be used to perform routine operation and maintenance (O&M) of the recreation facilities. Facilities include 13 developed recreation areas, eight boat ramps, 340 campsites, and over 400 picnic sites.

**H:** N/A

**EN:** $633,000 – Funding provides for routine O&M for environmental stewardship.

**WS:** N/A

**OTHER INFORMATION:** Arkabutla Lake has a drainage area of 1,000-square miles and has a flood pool of 33.4 surface acres.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Big Sunflower River, MS

**AUTHORIZATION:** The Flood Control Acts of 1944 (P.L. 78-534), 1946 (P.L. 79-526), 1950 (Title II of P.L. 81-516), 1962 (Title II of P.L. 87-874), and 1965 (Title II of P.L. 89-298)

**LOCATION AND DESCRIPTION:** The Big Sunflower River Basin comprises an area of 4,200-square miles in northwest Mississippi.

**FISCAL YEAR 2016 ALLOCATION:** $285,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine operation and maintenance (O&M) of the project, including water control analysis, data gathering and mitigation at Muscadine Complex.

**FISCAL YEAR 2017 ALLOCATION:** $285,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to perform routine operation and maintenance (O&M), and for operations and maintenance of the Muscadine Complex Mitigation Area.

**BUDGETED AMOUNT FOR FY 2018:** M: $0 O: $135,000 T: $135,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $135,000 – FY 2018 funds will be used to perform routine operation and maintenance (O&M) of the project including mitigation at Muscadine Complex.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** N/A

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Enid Lake, MS

**AUTHORIZATION:** Flood Control on the Mississippi River of 1928 (P.L. 70-391) and 1936 (P.L. 74-678), 1937 Flood Control Act of 1936 amendments (P.L. 75-406), Flood Control Acts of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 78-534), and 1946 (P.L. 79-526)

**LOCATION AND DESCRIPTION:** Enid Lake is located in Yalobusha, Panola, and Lafayette Counties in north-central Mississippi east of Enid and south of Batesville. Enid Lake is on the Yocona River and provides for flood damage reduction in the Yazoo Basin. Recreation and tourism associated with the lake play a major economic role in the region.

**FISCAL YEAR 2016 ALLOCATION:** $6,178,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used for operation and maintenance (O&M) at a reduced level of service in all authorized mission areas. Additional funds of $2,277,000 were used to continue routine operation and maintenance, plans and specs for water well at Persimmon Hill, plans and specs for Enid Bridge North Access, and plans and specs for Americans with Disabilities Act (ADA) Accessible Fishing Pier, replace concrete tables at 8 recreation sites, restroom/shower house renovations at Water Valley Landing and Riverview, and replace comfort station at Overlook Recreation area to ADA compliance.

**FISCAL YEAR 2017 ALLOCATION:** $5,449,000

**DESCRIPTIONS OF WORK FOR FY 2017:** Funding will be used to operate and maintain the project, including inspections and data collection and analysis of flood control structures, Outlet Works LED Lighting installation, recreation facilities; management of wildlife and natural resources, and cultural resources site monitoring and protection.

**BUDGETED AMOUNT FOR FY 2018:** M: $195,000 O: $4,950,000 T: $5,145,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $2,558,000 – FY 2018 funds are used to perform routine operation and maintenance (O&M).

**RC:** $2,005,000 – FY 2018 funds will used to perform routine O&M of the recreation facilities. There is a total of $100,000 for sustainability work on this project to include replacing deteriorating picnic tables with concrete picnic tables in 8 recreation areas.

**H:** N/A

**EN:** $582,000 – FY 2018 funds will be used to perform operation and maintenance (O&M) for environmental stewardship.

**WS:** N/A

**OTHER INFORMATION:** Enid Lake has a drainage area of 560 square-miles and has a flood pool of 28,000 surface acres. The recreation facilities include 14 developed recreation areas, 15 boat ramps, 463 campsites, and over 260 picnic sites. Project visitation is approximately 569,000 day-visits per year.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $1,000, which was committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Greenwood, MS

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391) and the Flood Control Act of 1936 (P.L. 74-738), The 1937 Flood Control Act of 1936 amendments (75-406), and the Flood Control Acts of 1938 (75-761), 1941 (P.L. 77-228), 1944 (P.L. 78-534), and 1946 (P.L. 79-526)

**LOCATION AND DESCRIPTION:** The project is located in the Yazoo Basin of Mississippi, and includes the operation and maintenance (O&M) of the Greenwood Protection Works and 55 miles of levees, 14 miles of channels, two miles of ditch, 59 drainage structures, four pumping plants, and 7 weirs. It ensures the protection of the City of Greenwood from flooding by the Yazoo, Tallahatchie and Yalobusha Rivers.

**FISCAL YEAR 2016 ALLOCATION:** $1,207,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine operation & maintenance of the project including levee slide repairs.

**FISCAL YEAR 2017 ALLOCATION:** $807,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will used to perform routine operation & maintenance, inspections, data collection and analysis.

**BUDGETED AMOUNT FOR FY 2018:** M: $0 O: $644,000 T: $644,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $644,000 – FY 2018 funds will be used to perform operation and maintenance.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** None

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Grenada Lake, MS

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), The Flood Control Act of 1936 (P.L. 74-738), the 1937 Flood Control Act of 1936 amendments (P.L. 75-406), the Flood Control Acts of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 77-534), and 1946 (P.L. 79-526)

**LOCATION AND DESCRIPTION:** Grenada Lake is in Grenada County in north-central Mississippi northeast of Grenada. The lake encompasses portions of Grenada, Yalobusha, and Calhoun Counties. Grenada Dam is on the Yalobusha River and provides flood mitigation in the Yazoo Basin.

**FISCAL YEAR 2016 ALLOCATION:** $6,646,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 budget funds were used to continue routine operations and maintenance. Additional funding of $1,644,000 was used to raise customer service to a desirable level for visitors, remove an outdated building, construction of visitor center exhibits, plans and specs for installing concrete ditches on both berms on the downstream slope of the dam, upgrade GIS/GPS equipment, replace fire truck, and to construct Americans with Disability Act (ADA) accessible fishing pier at outlet channel.

**FISCAL YEAR 2017 CONFERENCE AMOUNT:** $6,752,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to operate and maintain the project including inspections and data collection and analysis of flood control structures, Outlet Works LED Lighting installation; recreation facilities; manage wildlife and natural resources; cultural resources site monitoring and protection.

**BUDGETED AMOUNT FOR FY 2018:** M: $90,000 O: $4,704,000 T: $4,794,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $2,279,000 – FY 2018 funds will be used to perform routine O&M.

**RC:** $1,950,000 – FY 2018 funds will be used to perform routine O&M of the recreation facilities. The facilities include 26 developed recreation areas, 19 boat ramps, 489 campsites, and 270 picnic sites.

**H:** N/A

**EN:** $565,000 – FY 2018 funds will be used to perform routine O&M for environmental stewardship.

**WS:** N/A

**OTHER INFORMATION:** Grenada Lake has a drainage area of 1,320 square miles and has a flood pool of 64,600 surface acres. Project visitation is over 1,800,000 day-visits per year.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $5,000, which was committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Main Stem, MS

**AUTHORIZATION:** The Flood Control Acts of 1941 (P.L. 77-228), 1944 (P.L. 78-534), and 1965 (Title II of P.L. 89-298)

**LOCATION AND DESCRIPTION:** The project is located in the Yazoo Basin in Mississippi and includes the operation and maintenance (O&M) for 136 miles of levees, 287 miles of channels, and 74 drainage structures.

**FISCAL YEAR 2016 ALLOCATION:** $1,794,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine operations & maintenance (O&M) of the project, including inspections and mitigation at Muscadine Complex.

**FISCAL YEAR 2017 ALLOCATION:** $ $1,344,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to perform routine operations & maintenance of the project, including inspections, data collection and analysis.

**BUDGETED AMOUNT FOR FY 2018: M:** $0 **O:** $943,000 **T:** $943,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $943,000 – Funding provides for routine O&M for flood risk management.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** None.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Sardis Lake, MS

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), The Flood Control Act of 1936 (P.L. 74-738), the 1937 Flood Control Act of 1936 amendments (P.L. 75-406), the Flood Control Acts of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 77-534), and 1946 (P.L. 79-526)

**LOCATION AND DESCRIPTION:** Sardis Lake is located in north-central Mississippi southeast of Sardis. Sardis Dam is located in Panola County, and the lake encompasses portions of Panola, Lafayette, and Marshall Counties. Sardis Dam is on the Little Tallahatchie River and stores floodwater for the Yazoo Basin. The project is authorized for flood damage reduction, environmental stewardship, and recreation, and tourism associated with the lake plays a major role in the region.

**FISCAL YEAR 2016 ALLOCATION:** $8,970,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine operation and maintenance (O&M) of the project, including wildlife and habitat management, real estate encroachments, outlet works lighting, cultural resources and inspections

**FISCAL YEAR 2017 ALLOCATION:** $ $7,297,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to perform routine operation and maintenance, including inspections and data collection and analysis of flood control structures, recreation facilities; management of natural resources; cultural resources site monitoring and protection; real estate encroachment and manage wildlife and habitat.

**BUDGETED AMOUNT FOR FY 2018:** M: $125,000 O: $5,776,000 T: $5,901,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $2,912,000 – FY 2018 funds will be used to perform routine O&M.

**RC:** $2,291,000 – FY 2018 funds will be used to perform routine recreation operations.

**H:** N/A

**EN:** $698,000 – FY 2018 funds will be used to perform routine O&M for environmental stewardship.

**WS:** N/A

**OTHER INFORMATION:** The Federal project covers 98,500 acres. Sardis Lake has a drainage area of 1,545-square miles and has a flood pool of 58,500-surface acres. The recreation facilities include 20 developed recreation areas, 28 boat ramps, 786 campsites, and over 460 picnic sites. Project visitation is approximately 1.3 million day-visits per year.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $2,000, which was committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Tributaries, MS

**AUTHORIZATION:** Flood Control Act of 1941, 1944, 1965

**LOCATION AND DESCRIPTION:** The project is located in the Yazoo Basin, MS, and includes the operation and maintenance of 136 miles of levees, 287 miles of channels, and 74 drainage structures.

**FISCAL YEAR 2016 ALLOCATION:** $967,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used for the minimal operations and maintenance of the project including inspections, data collection and analysis and slide repairs.

**FISCAL YEAR FY 2017 ALLOCATION:** $967,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used for the minimal operations and maintenance of the project including inspections, data collection and analysis and levee slide repairs.

**BUDGETED AMOUNT FOR FY 2018:** M: $0 O: $773,000 T: $773,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $773,000 - FY 2018 funds will be used for minimal operation and maintenance of the project including inspections, data collection and analysis.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** None.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Will M. Whittington Auxiliary Channel, MS

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), Flood Control Act of 1936 (P.L. 74-738), 1937 Flood Control Act of 1936 amendments (P.L. 75-406), Flood Control Act of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 78-534), 1946 (P.L. 79-526), 1962 (Title II of P.L. 87-874), and 1965 (Title II of P.L. 89-298)

**LOCATION AND DESCRIPTION:** The project is located in the headwater area of the Yazoo Basin in Mississippi. The project includes levees, a floodway, and landside drainage ditches from the vicinity of Silver City to the mouth of Big Sunflower River.

**FISCAL YEAR 2016 ALLOCATION:** $384,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine operations and maintenance (O&M) of the project, including levee slide repairs.

**FISCAL YEAR 2017 ALLOCATION:** $384,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to perform routine operations and maintenance of the project, including inspections, water quality, data gathering and levee slide repairs.

**BUDGETED AMOUNT FOR FY 2018:** M: $0 O: $307,000 T: $307,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $307,000 – FY 2018 funds will be used to perform routine O&M for flood risk management.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** This flood control feature splits the flows of the Yazoo River and reduces flood stages in the Yazoo Basin.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Yazoo Backwater Area, MS

**AUTHORIZATION:** The Flood Control Acts of 1941 (P.L. 77-228), 1944 (P.L. 78-534), and 1965 (Title II of P.L. 89-298)

**LOCATION AND DESCRIPTION:** The project is located in the Yazoo Basin of Mississippi, and includes the operation and maintenance (O&M) of seven drainage structures.

**FISCAL YEAR 2016 ALLOCATION:** $744,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 funds were used to perform routine operation and maintenance (O&M) of the project, including inspections, and mitigation at Lake George.

**FISCAL YEAR 2017 ALLOCATION:** $3,144,000

**DESCRIPTIONS OF WORK FOR FY 2017:** FY 2017 funds will be used to perform routine operation and maintenance of the project. Additional funds will be used to inspect the bridges that must be inspected every two years according to regulation.

**BUDGETED AMOUNT FOR FY 2018:** M: $0 O: $369,000 T: $369,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $369,000 – FY 2018 funds are used to perform routine operation and maintenance of the project, including inspections and surveys.

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** None.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $75,000, including $5,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River Tributaries, AR, IL, KY, LA, MS, MO and TN – Operation and Maintenance

**PROJECT NAME:** Yazoo Basin, Yazoo City, MS

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), The Flood Control Act of 1936 (P.L. 74-738), the 1937 Flood Control Act of 1936 amendments (P.L. 75-406), the Flood Control Acts of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 77-534), and 1946 (P.L. 79-526)

**LOCATION AND DESCRIPTION:** The project is located in the Yazoo Basin. The project includes the operation and maintenance (O&M) of Yazoo City Protection Works and includes levees, channels, drainage structures, pumping plants, and weirs.

**FISCAL YEAR 2016 ALLOCATION:** $731,000

**DESCRIPTIONS OF WORK FOR FY 2016:** Funds for FY 2016 will be used to perform routine operation and maintenance (O&M) of the project, including levee slide repairs

**FISCAL YEAR 2017 ALLOCATION**: $731,000

**DESCRIPTIONS OF WORK FOR FY 2017**: FY 2017 funds will be used to perform routine operation and maintenance of the project, including levee inspections, water quality and control analysis.

**BUDGETED AMOUNT FOR FY 2018:** M: $0 O: $584,000 T: $584,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**
**N:** N/A

**FRM:** $584,000 – FY 2018 funds will be used to perform routine operation and maintenance (O&M).

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** N/A

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project was $0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Operation and Maintenance

**PROJECT NAME:** Wappapello Lake, MO

**AUTHORIZATION:** Overton Act of 1936 and the Flood Control Act 1944 (P.L. 78-534).

**LOCATION AND DESCRIPTION:** The Missouri dam site lies 22 miles southeast of Greenville, 16 miles northeast of Poplar Bluff, and one mile southwest of Wappapello. This project is located on the St. Francis River at river-mile 309 in the Ozark uplands of Wayne County and is authorized for flood control, recreation, water quality, and conservation of fish and wildlife. Wappapello Lake consists of 44,000 acres of land and water (8,400 acres).

**FISCAL YEAR 2016 ALLOCATION:** $8,594,000

**DESCRIPTIONS OF WORK FOR FY 2016:** FY 2016 activities included performing routine operations and maintenance (O&M); LED lighting installation; New Year's & August flood fights and responses; 75 year anniversary celebration & events; Gatehouse & visitor center roof repairs; Real estate inholding acquisitions; Wetland construction; and Greenville Campground water, sewer and electric rehabilitation was begun. Leveraged dollars with use of volunteers and partnerships.

**FISCAL YEAR 2017 ALLOCATION:** $14,063,696

**DESCRIPTIONS OF WORK FOR FY 2017:** Operation and maintenance of dam, gatehouse, dikes, etc.; Perform water control and data analysis, real estate management; dam periodic inspection and repairs; maintenance of recreation areas and management of environmental stewardship program; Master Plan revision; Greenville campground rehabilitation; water line replacement; and wildlife management activities. Additional funds will be used for State Highway road relocation, elevation of county road, Greenville bike trail, replace/update security and communications features of the gate house and visitors center, update project master plan, contracting support and materials for unmanned aerial vehicle operations.

**BUDGETED AMOUNT FOR FY2018:** **M:** $1,671,000 **O:** $2,535,000 **T:** $4,206,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** N/A

**FRM:** $1,744,000 – Funding provides for O&M for flood risk management.

**RC:** $1,927,000 – Funding provides for routine O&M of recreation areas, facilities and programs.

**H:** N/A

**EN:** $535,000 – Funding provides for routine O&M the of environmental stewardship program.

**WS**: N/A

**OTHER INFORMATION:** Project visitation was 1,878,000 day-visits in FY 2012.

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 2017 for this project is $239,000, including $106,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2018 from prior appropriations for use on this effort is $0.*

**APPROPRIATION TITLE:** Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Operation and Maintenance

**PROJECT NAME:** Memphis Harbor, McKellar Lake, Memphis, TN

**AUTHORIZATION:** Flood Control of the Mississippi River Act of 1928 (P.L. 70-391), House Document 90/70/1, as amended by subsequent acts, as modified and expanded by Senate Document 51/80/1, approved 1946.

**LOCATION AND DESCRIPTION:** This project is a moderate-use, shallow draft Federal harbor located near Memphis at Mississippi River mile 725.5. The project provides maintenance dredging to provide barge traffic year-round access to harbor facilities. A petroleum refinery has facilities in this harbor that provide fuel to Memphis International Airport and Tennessee Valley Authority (TVA). The navigation channel extends 7.5 miles into the harbor with a 12-foot project depth and 300- to 500-foot width at various locations.

**FISCAL YEAR 2016 ALLOCATION:** $3,707,000

**DESCRIPTIONS OF WORK FOR FY 2016:** $2,107,000 was used to collect hydrographic survey data in the harbor and perform limited dredging of the mouth and inner harbor. An additional amount of $1,600,000 was used for dredging the harbor channel to authorized dimensions.

**FISCAL YEAR 2017 ALLOCATION:** $2,632,000

**DESCRIPTIONS OF WORK FOR FY 2017:** Funds will be used for navigation channel surveys and routine operation and maintenance. Additional funds will be used for minimal critical inner harbor dredging to provide users with access to the harbor facilities.

**BUDGETED AMOUNT FOR FY 2018:** M: $1,666,000 O: $0 T: $1,666,000 1/

**DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2018:**

**N:** $1,666,000 – Funding provides for routine operation and maintenance (O&M) for authorized channel dimensions.

**FRM:** N/A

**RC:** N/A

**H:** N/A

**EN:** N/A

**WS:** N/A

**OTHER INFORMATION:** The five-year average commercial tonnage is 7,766 thousand tons. A petroleum refinery has facilities in this harbor that provide fuel to Memphis International Airport and Tennessee Valley Authority (TVA).

*1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2016 into FY 20176 for this project is $134,000, including $24,000 committed within the Corps for scheduled ongoing requirements in FY 2017. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY2018 from prior appropriations for use on this effort is $0.*